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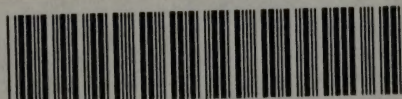
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PART III

COMMENTARY

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1959







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# EXPLANATORY NOTES

## 1. Populations

The estimates of population appearing in this volume and described as "home" or "total" populations, have the following content :

*Home population*—the population, of all types, actually in England and Wales, distributed by area according to residence.

*Total population*—the home population *plus* members of H.M. Forces belonging to England and Wales and serving overseas but *excluding* the Forces of other countries temporarily in England and Wales.

## 2. Numbering of Tables

Of the tables referred to in this review, those numbered in Arabic numerals will be found in "Part I, Tables, Medical" and those lettered will be found in "Part II, Tables, Civil" for the year in question, while those numbered in Roman numerals appear in this volume.

## 3. Indication of Significance

Rates based upon less than 20 births, deaths, notifications or divorces are distinguished by italic type as a warning to the user that the smallness of the experiences may affect their significance (see also page 9 of the 1936 *Statistical Review, Text Volume*).

Rates given as 0 indicate that the rate is less than half the final digit shown. A dash (—) in any column indicates that there were no events.

## 4. Definition of Areas

**London A.C.** = administrative county of London which consists of the City of London (including the Inner and Middle Temples) and the metropolitan boroughs.

**C.B.** = county borough ; **M.B.** = municipal borough ; **Met.B.** = metropolitan borough ; **U.D.** = urban district ; **R.D.** = rural district.

## 5. Standard Regions

The constitution of the standard regions of England and Wales used in this volume is as follows :

<p><b>REGION I</b> <i>Northern</i> Cumberland Durham Northumberland Westmorland Yorkshire, North Riding</p> <p><b>REGION II</b> <i>East and West Ridings</i> Yorkshire, East Riding Yorkshire, West Riding</p> <p><b>REGION III</b> <i>North Midland</i> Derbyshire, Part of<sup>1</sup> Leicestershire Lincolnshire— Parts of Holland Parts of Kesteven Parts of Lindsey Northamptonshire Nottinghamshire Peterborough, Soke of Rutland</p>	<p><b>REGION IV</b> <i>Eastern</i> Bedfordshire Cambridgeshire Ely, Isle of Essex, Part of<sup>2</sup> Hertfordshire, Part of<sup>3</sup> Huntingdonshire Norfolk Suffolk, East Suffolk, West</p> <p><b>REGION V</b> <i>London and South Eastern</i> Essex, Part of<sup>4</sup> Hertfordshire, Part of<sup>5</sup> Kent London Admin. County Middlesex Surrey Sussex, East Sussex, West</p>	<p><b>REGION VI</b> <i>Southern</i> Berkshire Buckinghamshire Dorset Oxfordshire Southampton Wight, Isle of</p> <p><b>REGION VII</b> <i>South Western</i> Cornwall Devon Gloucestershire Somerset Wiltshire</p> <p><b>REGION VIII</b> <i>Wales I (South East)</i> Brecknockshire Carmarthenshire Glamorganshire Monmouthshire</p>	<p><i>Wales II (remainder)</i> Anglesey Caernarvonshire Cardiganshire Denbighshire Flintshire Merionethshire Montgomeryshire Pembrokehire Radnorshire</p> <p><b>REGION IX</b> <i>Midland</i> Herefordshire Shropshire Staffordshire Warwickshire Worcestershire</p> <p><b>REGION X</b> <i>North Western</i> Cheshire Derbyshire, Part of<sup>6</sup> Lancashire</p>
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1. All except Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D. and Chapel en le Frith R.D.

2. All except East Ham C.B., West Ham C.B., Chingford M.B., Wanstead and Woodford M.B., Leyton M.B., Walthamstow M.B., Ilford M.B., Barking M.B., Dagenham M.B., Waltham Holy Cross U.D. and Chigwell U.D.

3. All except Barnet U.D., Bushey U.D., Cheshunt U.D., East Barnet U.D. and Elstree R.D.

4. All areas stated in 2 above.

5. All areas stated in 3 above.

6. All areas stated in 1 above.



## 6. Conurbations

The conurbation areas used in this volume are those which were agreed in 1950, under the aegis of the Interdepartmental Committee on Social and Economic Research and the Central Statistical Office, for the presentation of official statistics generally.\* They each consist of an aggregation of entire local authority areas and are constituted as follows :

Tyneside			
Durham		Northumberland	
Gateshead C.B.	Felling U.D.	Newcastle upon Tyne C.B.	Longbenton U.D.
South Shields C.B.	Hebburn U.D.	Tynemouth C.B.	Newburn U.D.
	Jarrow M.B.		Wallsend M.B.
	Whickham U.D.	Gosforth U.D.	Whitley Bay M.B.
West Yorkshire			
Yorkshire, West Riding			
Bradford C.B.	Aireborough U.D.	Heckmondwike U.D.	Ossett M.B.
Dewsbury C.B.	Baildon U.D.	Holmfirth U.D.	Pudsey M.B.
Halifax C.B.	Batley M.B.	Horbury U.D.	Queensbury and Shelf U.D.
Huddersfield C.B.	Bingley U.D.	Horsforth U.D.	Ripponden U.D.
Leeds C.B.	Brighouse M.B.	Keighley M.B.	Rothwell U.D.
Wakefield C.B.	Colne Valley U.D.	Kirkburton U.D.	Shipley U.D.
	Denby Dale U.D.	Meltham U.D.	Sowerby Bridge U.D.
	Denholme U.D.	Mirfield U.D.	Spennorth M.B.
	Elland U.D.	Morley M.B.	Stanley U.D.
South East Lancashire			
Cheshire	Lancashire		
Stockport C.B.	Bolton C.B.	Horwich U.D.	Urmston U.D.
	Bury C.B.	Irlam U.D.	Wardle U.D.
Alderley Edge U.D.	Manchester C.B.	Kearsley U.D.	Westhoughton U.D.
Altrincham M.B.	Oldham C.B.	Lees U.D.	Whitefield U.D.
Bowdon U.D.	Rochdale C.B.	Littleborough U.D.	Whitworth U.D.
Bredbury and Romiley U.D.	Salford C.B.		Worsley U.D.
Cheadle and Gatley U.D.	Ashton-under-Lyne M.B.	Little Lever U.D.	
Dukinfield M.B.	Audenshaw U.D.	Middleton M.B.	
Hale U.D.	Chadderton U.D.	Milnrow U.D.	
Hazel Grove and Bramhall U.D.	Crompton U.D.	Mossley M.B.	
Hyde M.B.	Denton U.D.	Prestwich M.B.	
Marple U.D.		Radcliffe M.B.	
Sale M.B.	Droylsden U.D.	Royton U.D.	
Stalybridge M.B.	Eccles M.B.	Stretford M.B.	
Wilmslow U.D.	Failsworth U.D.	Swinton and Pendlebury M.B.	
Disley R.D.	Farnworth M.B.	Tottington U.D.	
	Heywood M.B.		
Merseyside			
Cheshire	Lancashire		
Birkenhead C.B.	Ellesmere Port M.B.	Bootle C.B.	Huyton-with-Roby U.D.
Wallasey C.B.	Hoylake U.D.	Liverpool C.B.	Litherland U.D.
	Neston U.D.		
Bebington M.B.	Wirral U.D.	Crosby M.B.	
West Midlands			
Staffordshire	Warwickshire	Worcestershire	
Smethwick C.B.	Darlaston U.D.	Birmingham C.B.	Dudley C.B.
Walsall C.B.	Rowley Regis M.B.		
West Bromwich C.B.	Sedgley U.D.	Solihull M.B.	Halesowen M.B.
Wolverhampton C.B.	Tettenhall U.D.	Sutton Coldfield M.B.	Oldbury M.B.
	Tipton M.B.		Stourbridge M.B.
Aldridge U.D.	Wednesbury M.B.		
Amblecote U.D.	Wednesfield U.D.		
Bilston M.B.	Willenhall U.D.		
Brierley Hill U.D.			
Coseley U.D.			

\* See *Census 1951, England and Wales, Preliminary Report*, page xxii, H.M.S.O. price 5s. 0d. net ; also *Census 1951, England and Wales, Report on Greater London and Five Other Conurbations*, page xv, H.M.S.O. price £5 5s. 0d. net.

# Greater London

London (whole county)		Kent	Essex
Middlesex (whole county)		Beckenham M.B. Bexley M.B. Bromley M.B. Chislehurst and Sidcup U.D. Crayford U.D. Erith M.B. Orpington U.D. Penge U.D.	East Ham C.B. West Ham C.B.
Surrey		<i>Hertfordshire</i> Barnet U.D. Bushey U.D. Cheshunt U.D. East Barnet U.D. Elstree R.D.	Barking M.B. Chigwell U.D. Chingford M.B. Dagenham M.B. Ilford M.B. Leyton M.B. Waltham Holy Cross U.D. Walthamstow M.B. Wanstead and Woodford M.B.
Croydon C.B.	Kingston-upon-Thames M.B.		
Banstead U.D.	Malden and Coombe M.B.		
Barnes M.B.	Merton and Morden U.D.		
Beddington and Wallington M.B.	Mitcham M.B.		
Carshalton U.D.	Richmond M.B.		
	Surbiton M.B.		
Coulsdon and Purley U.D.	Sutton and Cheam M.B.		
Epsom and Ewell M.B.	Wimbledon M.B.		
Esher U.D.			

## 7. Urban and Rural Aggregates

Urban and Rural Aggregates relate to aggregates of conurbations, and of areas outside conurbations. The latter are subdivided into (a) Urban areas with (i) populations of 100,000 and over, (ii) populations of 50,000 and under 100,000 and (iii) populations under 50,000 (for this purpose areas are allocated according to the size of their enumerated population at the 1951 Census) and (b) Rural Districts. "Urban areas" includes Boroughs and Urban Districts as defined under the Local Government Acts, and Rural Districts are as defined under those Acts.

## 8. Assignment of Vital Statistics by Area

In all tables births and stillbirths are classified according to the area of usual residence of the parents (or mother), and deaths according to the usual residence of the deceased. The definition of usual residence for this purpose was modified in 1953, the main change being that inmates of hospitals for the chronic sick and of mental and mental deficiency hospitals were in that year regarded as having been resident in the hospital. (A similar change with regard to persons dying in accommodation provided under Parts III and IV of the National Assistance Act, 1948, had already been brought into effect during 1952.) Rates for areas in 1953 are therefore not comparable with those for 1952. Details of the new definitions were conveyed to Medical Officers of Health in 1952 in a memorandum which was reproduced in the 1953 *Text Volume*. The method of classification of chronic sick hospitals for this purpose was slightly modified in 1954 and from that year rates for a certain number of smaller areas may not be comparable with those for 1953.

## 9. General

See also the Explanatory Notes to the Tables volumes, Parts I and II.



## CORRIGENDA

### Statistical Review 1956, Part III, Commentary Volume

- Page 25 Table XVI, column 1, *for*  $\frac{1}{8}$  *read*  $\frac{1}{3}$
- Page 28 Line 19, *for* 1955 *read* 1956
- Page 66 Line 24, *for*  $M^1$  and  $r^1$  *read*  $M'$  and  $r'$   
Line 26, *for*  $C.M.I. = \Sigma M (r + r^1) / LM^1 (r + r^1)$   
*read*  $C.M.I. = \Sigma M (r + r') / \Sigma M' (r + r')$

## INTRODUCTION

The aim of this Commentary is mainly to underline the more important statistics already published in the first two parts of the *Statistical Review* for 1957. By making comparisons with figures for earlier years, by reviewing trends and by explaining changes so far as possible the Commentary is intended to assist those who, for reasons of administration or research, have to take account of the vital statistics of England and Wales for 1957. In addition, some account is given of other aspects of the work of the General Register Office during that year.

### Population

The estimated home or actual population of England and Wales at mid-1957 was 44·9 millions. In round numbers the population has increased by an average 180,000 a year since 1951 at a rate of increase which has tended to quicken slightly, the increment between the mid-year 1956 and 1957 amounting to 240,000 or 0·5 per cent. Annual natural increase has varied from 141,000 in 1954–1955, a year of lower than average births and higher than average deaths, to 226,000 in 1956–1957, a year of high numbers of births and low mortality. With very little variation from year to year the net gain to England and Wales of migrations within the United Kingdom averaged 19,000 over the six years from mid-1951 to mid-1957. This serves to balance net emigration overseas.

### Births

The 723,381 live births which occurred in England and Wales in 1957 were the largest number since 1949 and the crude birth rate of 16·1 per thousand population was the highest since 1950. Until the spring of 1955 the birth rate had been fairly constant, with some tendency to fall, since the end of the disturbance caused by the war, but it has been rising ever since.

The birth rate per thousand women aged 15–44 was 80·0 in 1957; this brought the rate back to the level of the early nineteen-twenties and was 29 per cent higher than in 1938.

### Marriages

There were 346,903 marriages contracted in England and Wales in 1957. This was about 6,000 fewer than in 1956 and is explained by the smaller number of unmarried persons of marriageable age in the population. The crude marriage rate, 15·4 persons marrying per thousand total population, was just slightly lower than in 1956. The tendency to marry younger is reflected in the proportion of brides and grooms who are under 21. For men it rose from 3·4 per cent in 1938 to 8·7 per cent in 1956 and 9·6 per cent in 1957; for women in 1938 it increased to 32·2 and 33·6 per cent in 1956 and 1957.

### Divorce

In England and Wales 27,858 petitions for dissolution or annulment of marriage were filed in 1957. Decrees made absolute during the year numbered 23,785 or 2 per thousand married couples. The analysis of dissolution and annulments made absolute was put on a new basis in 1957 and it will be seen that the tables in Part II are more detailed.



## **Mortality**

In 1957 there were 514,870 deaths registered in England and Wales. The crude death rates were 12·3 per thousand males and 10·7 per thousand females, both slightly lower than the rates for 1956. On the basis of the death rates for 1955-57, the expectation of life at birth was 68 years for males and 73 years for females.

## **Infant mortality**

The infant mortality rate in 1957 was 23·1 and the early neonatal mortality rate (deaths in the first week) 14·1 per thousand live births; the stillbirth rate was 22·5 per thousand total births, live and still. Both the infant mortality and the neonatal rates were the lowest yet recorded in England and Wales.

## **Tuberculosis**

There were 4,784 deaths assigned to tuberculosis in 1957 compared with 5,375 in 1956, a fall of 591 or 11 per cent. Deaths from respiratory tuberculosis numbered 4,249 representing a fall of 604 (12 per cent) on the number for 1956.

## **Cancer**

The deaths assigned to cancer during 1957 numbered 94,017; of these 50,056 were of males and 43,961 of females. For each sex these numbers are the highest yet recorded.

## **Diseases of the circulatory system**

188,630 deaths in 1957 were assigned to diseases of the circulatory system and a further 73,669 to vascular lesions affecting the central nervous system, making 262,299 deaths in all, or 51 per cent of all deaths in England and Wales.

## **Accidental and violent deaths**

The 21,561 deaths due to accidents and violence in 1957 compared with 21,870 in 1956 and 21,469 in 1955. Crude death rates, which were 604 per million living for males and 383 for females in 1956, decreased to 594 and 374 in 1957. The number of deaths from motor vehicle accidents in 1957 was 112 less than in 1956 and at ages 0-9 the rates per million reached the low levels of 74 for boys and 42 for girls. At the other end of life, the rate of 604 for men aged 75 and over was the highest for this age-group since 1942 for this cause.

3,170 male and 2,145 female deaths were attributed to suicide in 1957. Domestic gas was employed by 42 per cent of the male and 56 per cent of the female suicides.

## **International co-operation in population and health statistics**

Almost exactly ten years after the date of the first meeting, representatives of all fifteen member states met in New York on the 25th February 1957 for the ninth session of the Population Commission of United Nations. The Commission's report was noted by the Economic and Social Council at its twenty-third session when two resolutions recommended by the Commission were adopted. One resolution focused attention on the need to improve census and vital statistics in Africa, the other aimed at encouraging governments to help the United Nations to meet increasing demands for technical assistance.

The Conference of European Statisticians which met in Geneva in June 1957 considered a report on the second session of the Working Group on Censuses of Population and Housing held in the previous November. This Working Group had a further meeting in December 1957.

The Tenth World Health Assembly adopted two resolutions concerned with health statistics: one was introduced by the United States delegation with the object of considering how far WHO could do more to help countries to remedy defects and fill gaps in health statistics; the other, sponsored by seven countries on the initiative of the United Kingdom, pointed to the epidemiological study of cancer as a potentially useful method of research into its aetiology.

Other international meetings to which reference is made in this Commentary include the WHO Sub-Committee on Cancer Statistics, a Symposium on Public Health Aspects of Chronic Disease, an Inter-American Seminar on Classification of Diseases, the Ninth International Conference of Labour Statisticians, the thirtieth regular session of the International Statistical Institute and the Second World Congress on Psychiatry.

Thirty-five students and others from twenty-two Commonwealth and foreign countries spent varying periods studying at the General Register Office during 1957.

### **The Registration Service**

The number of searches paid for by the public in 1957, a total of 229,685, was the highest since 1952. There were 317,616 certificates issued during the year, the highest number since 1948. 2,511 births of legitimated persons were re-registered during the year and the number of entries in the Adopted Children Register was 13,403.

### **National Health Service Central Register**

During the year 1957, the National Health Service Central Register was notified of 1,557,472 persons who were recorded as having registered with doctors for the first time. The Register showed that 194,646 of these were already on doctors' lists.

### **Parliamentary and local government electors**

This Commentary includes particulars of the number of parliamentary and local government electors and their proportion to the total population. It also gives particulars about the Central Index of Service Voters.

General Register Office,  
Somerset House,  
London, W.C.2.  
October, 1959.



## POPULATION

The estimated *home* or actual population of England and Wales at mid-1957 was 44,907,000. This estimate relates to the number of people actually in the country; it includes all Armed Forces in England and Wales even though they may be drawn from other parts of the United Kingdom and Commonwealth or from any other country; it excludes any of H.M. Forces outside England and Wales even though they are drawn from this country.

The *total* population, viz. an estimate of the population belonging or economically attached to England and Wales, was 45,043,000; this includes an estimate of the proportion of H.M. Forces that may be regarded as drawn from England and Wales wherever they are stationed and excludes members of H.M. Forces drawn from other parts of the United Kingdom and Commonwealth and members of the Forces of other countries, even though they are temporarily in England and Wales.

The *civilian* population, which excludes all Armed Forces, was 44,425,000. Merchant seamen of England and Wales and visitors abroad are excluded from all three estimates; visitors to England and Wales are included. For the total population the first element should be included and the second excluded but the assumption is made, on the basis of past experience, that the two roughly balance.

**Table I. Estimated population mid-1951 to mid-1957, England and Wales**  
(*Figures in thousands*)

	Total			Home			Civilian		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1951 .. ..	44,007	21,233	22,774	43,815	21,044	22,771	43,284	20,530	22,754
1952 .. ..	44,166	21,320	22,846	43,955	21,110	22,845	43,402	20,576	22,826
1953 .. ..	44,301	21,397	22,904	44,109	21,206	22,903	43,541	20,658	22,883
1954 .. ..	44,480	21,492	22,988	44,274	21,288	22,986	43,742	20,774	22,968
1955 .. ..	44,623	21,569	23,054	44,441	21,389	23,052	43,916	20,879	23,037
1956 .. ..	44,821	21,669	23,152	44,667	21,517	23,150	44,151	21,013	23,138
1957 .. ..	45,043	21,782	23,261	44,907	21,648	23,259	44,425	21,177	23,248

Estimates of the population on all three bases for recent years are shown in Table I. Considering only the population actually in England and Wales it will be seen that this has increased since 1951 by an average of 180,000 a year in round numbers, and that the rate of increase has tended to quicken slightly, the increment in the last year amounting to 240,000, or 0·5 per cent. However, this is a relatively small rate of increase (it compares with 1·6 per cent for the world population as a whole, 1·6 per cent for Asia, and 0·6 per cent for Northern and Western Europe)\*.

\* U.N. *Demographic Yearbook* 1957. Weighted rates for continents 1952-56.

The annual growth in the population is the excess of the "natural increase" (the amount by which the number of births is greater than the number of deaths) over the net outward migration balance. The figures which make up the natural increase are shown in Table II, for the period from mid-1951 to mid-1957.

**Table II. Natural increase of the population mid-1951 to mid-1957, England and Wales**

Year ended 30th June	Births			Deaths			Natural increase		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952 .. ..	669,195	343,708	325,487	484,136	250,310	233,826	185,059	93,398	91,661
1953 .. ..	679,757	349,569	330,188	521,161	269,141	252,020	158,596	80,428	78,168
1954 .. ..	680,794	349,788	331,006	487,860	252,565	235,295	192,934	97,223	95,711
1955 .. ..	665,190	342,175	323,015	524,446	269,795	254,651	140,744	72,380	68,364
1956 .. ..	687,214	354,082	333,132	516,340	266,001	250,339	170,874	88,081	82,793
1957 .. ..	709,658	364,569	345,089	483,659	248,948	234,711	225,999	115,621	110,378

It will be seen that the annual flow of births has increased since 1955 and is now greater than 700,000. Deaths tend to fluctuate more than births owing to the irregular incidence of epidemics of influenza and other respiratory infections and the uneven influence of other factors affecting mortality, e.g. severe weather or fog. Over the period of the table they may have averaged 503,000. The annual natural increase has varied from 141,000 in 1954-55, a year of lower than average births and higher than average deaths, to 226,000 in 1956-57, a year of high numbers of births and low mortality. It will be noticed also that while boy babies outnumber girl babies by about 20,000, the deaths of men exceed those of women by some 15,000, so that in the natural increase each year the male excess is a mere 5,000 at most.

The annual loss or gain by net migration is indicated by the figures in Table III. Net migration overseas is more variable than net migration from other parts of the United Kingdom. The two elements are quite different.

**Table III. Migration mid-1951 to mid-1957, to and from England and Wales**  
(Figures in thousands)

Year ended 30th June	Net overseas migration			Net migration within United Kingdom			Total net migration		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952 .. ..	- 45*	- 17	- 28	+ 19	+ 11	+ 8	- 26	- 6	- 20
1953 .. ..	- 42	- 15	- 27	+ 18	+ 11	+ 7	- 24	- 4	- 20
1954 .. ..	- 30	- 11	- 19	+ 13	+ 8	+ 5	- 17	- 3	- 14
1955 .. ..	- 15	- 6	- 9	+ 20	+ 12	+ 8	+ 5	+ 6	- 1
1956 .. ..	—	- 2	+ 2	+ 25	+ 13	+ 12	+ 25	+ 11	+ 14
1957 .. ..	- 20	- 13	- 7	+ 20	+ 12	+ 8	—	- 1	+ 1

\* Including Allied Forces discharged between mid-1951 and mid-1952.

With regard to migration within the United Kingdom it is estimated, for example, that in the year mid-1956 to mid-1957, there was a net gain of some 20,000 persons (12,000 males, 8,000 females) to England and Wales from



Ireland and Scotland. The immigrants are mainly younger persons in search of employment opportunities. There is at present no measure of the separate immigrant and emigrant components of the net gain from other parts of the United Kingdom. Over the six years from mid-1951 to mid-1957 the net gain averaged 19,000 and there has been comparatively little variation from year to year.

Net migration overseas (i.e. outside the United Kingdom) is the difference between two large opposing movements of the same order of size (about 300,000). A relatively small change in either movement can therefore produce a comparatively large variation in the balance. Generally the balance is outward and over the six years to which Table III relates it is estimated to have represented an average annual loss of 25,000 persons (10,000 males and 15,000 females). Taking migration overseas and within the United Kingdom together, therefore, the situation is that shown in the fourth main column of Table III, viz. large fluctuations from year to year due to the differing incidence of the two movements but, in the longer run, a rough balance between them. In general at the present time the *net* outward migration from England and Wales is almost a negligible quantity.

### The effects of migration

Two questions remain, especially in relation to migration outside the United Kingdom. Is there a sufficiently large flow of migrants from England and Wales to the Commonwealth? Does the rough balance of inward and outward movement conceal a large selective loss of technological manpower—highly skilled emigrants being balanced by less skilled or unskilled immigrants?

On the first question the Overseas Migration Board stated in their Second Report (1956, *Cmd. 9835*): "We believe that for political, strategic and economic reasons it is important that migration from the United Kingdom to the Commonwealth should be maintained. We are not at the moment supplying the express needs of those members of the Commonwealth who would like to see at least half of their immigrants of British stock. We believe, however, that we should aim to supply the desired proportion of migrants, subject to the state of our economy and in particular to the overall employment position." Those requirements of the Commonwealth were estimated in the same Report to be between 150,000 and 200,000 people each year. Subsequently gross emigration to the Commonwealth increased in volume and in 1957 was exceptionally high (at about 175,000 to Canada, Australia, New Zealand, Union of South Africa and the Federation of Rhodesia and Nyasaland) and approached the required level. But there has also been latterly some contraction owing to changes in the economic situation of these countries so far as they have been affected by trade recession. In their Fourth Report (1958, *Cmd. 619*) the Board took account of these factors and reaffirmed the policy enunciated earlier.

With regard to the second question, the Overseas Migration Board also stated in their Fourth Report: "It would seem that while the inflow of workers may not generally match in skill the outflow, there is a much higher proportion of immigrants in the skilled and professional categories than is generally supposed". The Board do not feel that as yet there is anything in the net migration movement that need give cause for concern as to the effect upon manpower resources.

The various elements making up the total year to year movement in population are summarised in Table IV.

**Table IV. Population changes mid-1951 to mid-1957, England and Wales**

*(Figures in thousands)*

Year ended 30th June	Population at beginning as corrected			Natural increase as estimated			Migration as estimated			Population at end as estimated and published		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952 ..	44,007	21,233	22,774	185	93	92	- 26	- 6	- 20	44,166	21,320	22,846
1953 ..	44,166	21,320	22,846	159	81	78	- 24	- 4	- 20	44,301	21,397	22,904
1954 ..	44,301	21,397	22,904	196	98	98	- 17	- 3	- 14	44,480	21,492	22,988
1955 ..	44,477	21,491	22,986	141	72	69	+ 5	+ 6	- 1	44,623	21,569	23,054
1956 ..	44,623	21,569	23,054	173	89	84	+ 25	+ 11	+ 14	44,821	21,669	23,152
1957 ..	44,819	21,668	23,151	224	115	109	-	- 1	+ 1	45,043	21,782	23,261

### Changes in population structure

The trend of changes in the sex, marital condition and age structure of the population was discussed fully in the 1956 Commentary (pages 6-8) and it is not proposed to go into the same degree of detail now. The situation may be summarised in the following way.

### Sex ratios

About 106 boys are born for every 100 girls, but the death rates for males are higher than those for females at all ages so that the number of males per thousand females falls from 1,053 (at mid-1957) at ages 0-4 to 999 at ages 30-34 (approximate equality), 770 at ages 60-64 and 568 at ages 75 and over (nearly twice as many women as men). At young ages falling mortality has narrowed the differential between the two sexes and has postponed the age-group in which the excess of males at birth is counterbalanced by excess male mortality from 5-9 in 1911 to 30-34 in 1957. At older ages the death rates for males have fallen much less than those for females, and consequently the excess of females at these ages has been increasing. At the 1911 Census there were 757 men for every 1,000 women at ages 65 and over; in 1957 there were only 648.

### Age structure

Two main movements may be discerned. First, after a large rise in the latter part of the 19th century, a sharp fall in the flow of births occurred; so that whereas in 1911 the younger age-groups of the population represented larger generations than the older age-groups (giving an unduly youthful population with 30.6 per cent aged 0-14 and 5.2 per cent aged 65 and over), in 1957 the situation has been reversed, the older age-group representing larger generations than younger age-groups (22.8 per cent aged 0-14 and 11.7 per cent aged 65 and over). The population has "grown up" or "aged" and its age structure has become more typical of a population with a relatively level flow of births, in which one would expect to have at current mortality about one in seven persons aged 65 or over. Second, and more recently, there have been upward fluctuations in the annual flow of births. There was a particularly sharp rise at the end of World War II with a peak of 880,000 live births in 1947, compared with an average annual figure of 608,000 in 1936-40. Again after a decline, at first rapid then gradual and a little irregular to 668,000 in 1955, there was a rise to 723,000 in 1957. In consequence there have been large fluctuations in the size of the child population which have created obvious difficulties for education authorities. The proportion of the population in the 0-14 age-group which was 21.2 per cent in 1939 rose to 22.2 per cent in 1951 and 22.8 per cent in 1957.



The more recent effect of these two movements has been to increase the proportions of the population outside the working age range and thus to increase the general economic pressure of dependency. The ratio of the population in the 0-14 and 65 and over age-groups taken together to the population in the 15-64 age-group had decreased from 0.56 in 1911 to 0.46 in 1931 but in 1957 it had risen to 0.53.

### Marital condition

As a result of the maintenance of relatively high marriage rates generally and in particular of an increase in the numbers of marriages at young ages, the proportion married has increased in all age-groups except the oldest where the effect of mortality in terminating marriages operates to a material extent. The following figures are illustrative:

Proportion married per 1,000 in each age-group

Age	Males			Females		
	1931 (census)	1951 (census)	1957 (estimate)	1931 (census)	1951 (census)	1957 (estimate)
15-24 .. .. .	70	125	149	140	272	305
25-34 .. .. .	640	720	748	658	798	844
35-44 .. .. .	855	862	869	752	820	857
45-54 .. .. .	847	877	882	720	759	786
55-64 .. .. .	795	850	862	619	624	650
65 and over .. .. .	619	664	685	341	352	342

In the youngest age-group 15-24 the proportion married has been, since 1931, doubled for men and more than doubled for women.

### Future prospects

The long term population trend on certain assumptions about future fertility, mortality and migration (closely related to current conditions), is shown in Table A5 of Part II of the *Statistical Review* for 1957. By 1977 the total population will have increased from 45,043,000 to 48,284,000. The proportion aged 0-14 will then have fallen slightly to 21.6 per cent and the proportion aged 65 and over will have risen to 14.9; the ratio of the 0-14 and 65 and over population to that aged 15-64 will have risen from 0.53 in 1957 to 0.58. The number of men in the working age range 15-64 will increase from 14,459,000 in 1957 to 15,349,000 in 1977, but they will then represent a slightly smaller proportion of the total population, 31.8 per cent as compared with 32.1 per cent in 1957. The number of persons in the National Insurance pensions age-groups (men 65 and over, women 60 and over) will rise from 6,551,000 in 1957 to 8,664,000 in 1977 and to 9,092,000 in 1987, but by the end of the century (1997) there will be a slight decline to 8,779,000.

# BIRTHS

## Live births

The 723,381 live births which occurred in England and Wales in 1957 were the largest number since 1949, and the crude birth rate of 16.1 per 1,000 population was the highest since 1950. The numbers by legitimacy and the rates for the most recent years are summarised in Table V, extracted from the serial Tables B and C in Part II.

**Table V. Live births by legitimacy and rate per 1,000 population, 1938, 1951-55, 1955, 1956 and 1957, England and Wales**

Period	Number of live births (thousands)			Rate per 1,000 population
	Total	Legitimate	Illegitimate	Total
1938	621.2	594.8	26.4	15.1
1951-55*	675.4	643.3	32.1	15.2
1955	667.8	636.7	31.1	15.0
1956	700.3	666.8	33.5	15.6
1957	723.4	688.8	34.6	16.1

\* Annual average.

The increase of 3.3 per cent over the previous year was not due to a similar change in the number of potential mothers. Until the late spring of 1955 the birth rate had been fairly constant since the end of the disturbance caused by the war, with some tendency to fall, but it has been rising ever since.

Table Q compares crude birth rates for some of the more developed countries of the world which have reliable birth registration statistics. In most of these countries the birth rate in recent years has been higher than before the war. Only in a few of them has it been rising during the last few years as in Britain : Austria, Germany, Spain and Switzerland are the clearer examples. Table Q takes no account of areas in Asia, Africa and Latin America where the population is growing rapidly and birth rates are known to be high, but for which reliable annual series are not available.

Crude birth rates, however, do not allow a true appreciation of current fertility trends and levels for reasons which are explained below, and they should be regarded as only rough guides.

### Birth rates per 1,000 women aged 15 to 44

As a first step to a more penetrating analysis the births may be related to the number of women of childbearing age instead of to the total population. This age-range is conventionally taken as 15-44. Next, legitimate and illegitimate births separately may be related to the married and unmarried women in that range respectively. Such rates are presented in Table VI together with ratios comparing them with the rates for 1938.



**Table VI. Live birth rates per 1,000 women aged 15-44 by legitimacy, 1841 to 1957, England and Wales**

*The ratios were calculated before rounding off the rates*

Year	Rate			Ratio to 1938 (taken as 100)		
	All live births per 1,000 women aged 15-44	Legitimate live births per 1,000 married women aged 15-44	Illegitimate live births per 1,000 unmarried women aged 15-44	All	Legitimate	Illegitimate
3-year averages						
1841	148.3	—	—	239	—	—
1851	149.8	294.9	19.4	241	268	337
1861	151.1	288.1	18.9	243	262	328
1871	155.7	296.3	17.2	250	269	298
1881	147.7	286.0	14.1	238	260	245
1891	129.7	263.9	10.5	209	240	182
1901	114.8	235.5	8.5	185	214	147
1911	98.3	197.4	7.9	158	179	138
1923*	79.1	155.2	6.5	127	141	112
1933*	61.1	114.0	5.5	98	104	95
1951	72.0	105.8	10.0	116	96	174
Individual years or annual averages						
1938	62.2	110.0	5.8	100	100	100
1939-49	71.4	112.6	10.5	115	102	182
1950-54	72.5	105.7	10.1	117	96	176
1955	72.8	103.7	10.3	117	94	178
1956	77.0	108.2	11.4	124	98	199
1957	80.0	111.5	12.1	129	101	210

\* 1923 (i.e., 1922-24) has been selected since in 1920 and 1921 conditions were still abnormal after the First World War, and 1933 (1932-34) because it marked the low point in numbers of births in the inter-war period.

The total rate rose in 1957 to the level of the early nineteen twenties and was 29 per cent higher than in 1938. (In the crude rate this change is obscured by the fall in the proportion of women aged 15-44 in the total population since 1938.) But the legitimate rate merely regained the 1938 level, and although the illegitimate rate was about twice as large as before the war it is clear that the bulk of the increase in the total rate since then is due to the larger proportion of women in this age-range who are married. This rise can be seen from the following statement and from Table XXVI on page 38.

Year	Proportion married among women aged 15-44 (per thousand)	Index (1938=100)
1938	541	100
1951	646	119
1956	677	125
1957	683	126

## Reproduction rates

Table VI illustrates the changes in the annual number of births per woman in the reproductive age-range over the last hundred years. The picture which it gives is not very much affected by changes in the age distribution of women within this range.

Table VII. Gross and net reproduction rates, 1841–1957, England and Wales

Year	G.R.R.	N.R.R.	Year	G.R.R.	N.R.R.
3-year averages			Individual years or annual averages		
1841 ..	2.237	1.349	1938 ..	0.897	0.805
1851 ..	2.264	1.381	1939–49	1.031	0.945
1861 ..	2.277	1.427	1950–54	1.061	1.015
1871 ..	2.356	1.511	1955 ..	1.077	1.038
1881 ..	2.252	1.511	1956 ..	1.146	1.107
1891 ..	1.973	1.369	1957 ..	1.190	1.149
1901 ..	1.702	1.238			
1911 ..	1.428	1.121			
1923 ..	1.153	0.966			
1933 ..	0.862	0.756			

This can be seen from the gross reproduction rates in Table VII and from the following comparison:

Index Numbers (1938 = 100)

Period	All live births per 1,000 women aged 15–44	Gross reproduction rate
1840–42	239	249
1900–02	185	190
1922–24	127	129
1938	100	100
1939–49	115	115
1950–54	117	118
1957	129	133

The gross reproduction rate is a measure of annual fertility which is standardised for the detailed sex-age composition of the population. It is calculated by summing the female age fertility rates (live female births per woman in each age-group) multiplied by the width of the age-groups used.

The net reproduction rates also shown in Table VII differ from the gross rates by being discounted for the mortality of the period. At one time the N.R.R. was widely used, not as an index of the births and deaths of the year, but as a measure of the implications of current family building habits and mortality for the ultimate replacement of the population. In this sense it is now discredited, because it would imply unrealistic and even inconsistent assumptions, at least in societies limiting their families. It is subject to many of the temporary influences which affect annual numbers of births. The figures are given here for the convenience of users who like to keep serial records in this form up to date.

The question of replacement is discussed on pages 19–20.



## Age, duration and parity

### Tabulation basis

Fertility tabulations can be made on the basis of either live births or maternities, and which is most convenient depends on the use to which they are put. The tables in Part II distinguish so many characteristics, including legitimacy, age of mother, duration of marriage and number of previous children, that it is not practical or economic to provide completely parallel classifications of births and maternities.

Full analyses by legitimacy and mother's age are given for both live births and maternities (Tables AA to FF and TT), but the legitimate fertility tabulations involving duration of marriage or number of previous children are restricted to maternities (Tables HH to MM and QQ). The legitimate fertility rates by age of mother and year and duration of marriage (Table OO) were also in terms of maternities until 1955 ; beginning in 1956 they have been converted to a live birth basis by factors of the kind shown in Table VIII. Table PP (mean family size by year of marriage) has always related to live births.

Maternities are slightly greater in number than the corresponding live births (stillbirths included in the former exceeding the multiple births excluded), but the excess is small and the maternity statistics can be converted to live birth figures with sufficient accuracy for most purposes by means of the appropriate ratios of live births to maternities. Ratios for 1938 to 1956 have appeared in previous Commentaries and for 1957 they are shown in Table VIII.

**Table VIII. Ratio of legitimate live births to legitimate maternities by age of mother at maternity, 1957, England and Wales**

Age of mother at maternity						
All ages	Under 20	20–	25–	30–	35–	40 and over
0.990	0.988	0.991	0.993	0.992	0.986	0.965

The tables distinguishing duration of marriage and numbers of previous children (Tables HH to QQ) are confined to women married once only. Comparable statistics for women married more than once and for all married women, both classified by duration of *current* marriage, relating to 1952, were published in the 1955 Commentary. Ratios comparing the three sets of fertility rates were also given there (pages 30–33).

### Incomplete statement at registration

The annual statistics have been slightly incomplete through the occasional failure to obtain at birth registration a record of the mother's age or duration of marriage or the number of her previous children. The proportion of "not stated" cases of various types in the records for women married once only is shown in Table QQ. For all types of omission combined it is about  $\frac{1}{2}$  per cent.

As the number of omissions is so small and no severe bias in them is suspected the "not stated" cases have been proportionally distributed among the "stated" in Tables AA, HH, II, LL and MM ; for that form of presentation is more convenient for most users.

### Illegitimate births and pre-marital conceptions

35,098 of the 730,524 maternities occurring in 1957 were illegitimate, a proportion of 4·8 per cent. Tables B and C of Part II contain serial records of the numbers of births and of rates since 1851 ; numbers of maternities from 1938 onwards are shown in column 2 of Table IX.

**Table IX. Illegitimate maternities and pre-maritally conceived legitimate maternities, 1938 to 1957, England and Wales**

Year	Illegitimate maternities	Pre-maritally conceived legitimate maternities*	Total maternities conceived extra-maritally*		Percentage of extra-maritally conceived maternities legitimated by marriage of parents before birth of child
			Numbers	Percentage of all maternities	
1	2	3	4	5	6
1938 .. ..	27,440	64,530	91,970	14·4	70·2
1939 .. ..	26,569	60,346	86,915	13·8	69·4
1940 .. ..	26,574	56,644	83,218	13·7	68·1
1941 .. ..	32,179	43,363	75,542	12·7	57·4
1942 .. ..	37,597	40,705	78,302	11·8	52·0
1943 .. ..	44,881	37,271	82,152	11·8	45·4
1944 .. ..	56,477	37,746	94,223	12·3	40·1
1945 .. ..	64,743	38,176	102,919	14·9	37·1
1946 .. ..	55,138	43,488	98,626	11·8	44·1
1947 .. ..	47,491	59,633	107,124	12·0	55·7
1948 .. ..	42,402	62,304	104,706	13·4	59·5
1949 .. ..	37,554	59,185	96,739	13·1	61·2
1950 .. ..	35,816	54,188	90,004	12·8	60·2
1951 .. ..	33,444	50,477	83,921	12·3	60·1
1952 .. ..	33,088	50,740	83,828	12·3	60·5
1953 .. ..	33,083	50,266	83,349	12·1	60·3
1954 .. ..	32,128	50,901	83,029	12·2	61·3
1955 .. ..	31,649	50,638	82,287	12·2	61·5
1956 .. ..	34,113	54,895	89,008	12·6	61·7
1957 .. ..	35,098	56,203	91,301	12·5	61·6

\* From 1952 onwards the figures relate to women married *once only*.

Legitimate maternities conceived before marriage and illegitimate maternities are complementary and should be considered together. This is clear from the figures for the period of the Second World War, when the number of illegitimate maternities rose and that of pre-maritally conceived legitimate maternities fell, leaving the combined number, and still more the combined proportion of all maternities, relatively stable.

Column 3 of Table IX shows the number of pre-maritally conceived legitimate maternities, taken as equivalent approximately to those at marriage duration under 9 months from 1952 onwards, and under about  $8\frac{1}{2}$  months before then. The combined total of extra-maritally conceived maternities is expressed as a percentage of all maternities in column 5. At about an eighth it has been slightly lower in recent years than in 1938. The effect of the change in duration tabulation in 1952 is indicated by the fact that if the 1951 figures are adjusted to the new basis by adding half a month's maternities the percentage for that year in column 5 is raised from 12·3 to 13·0.



In Table X extra-maritally conceived maternities are related to the population at risk, viz., unmarried women together with the mothers of legitimately born children conceived before marriage. To facilitate the comparison of recent rates with those before 1952 an additional column for 1951 has been provided showing the rates that would have been produced in that year on the tabulation basis adopted in 1952.

**Table X. Extra-maritally conceived maternities per 1,000 unmarried women (see text), 1938 to 1957, England and Wales**

Age of mother	1938	1939	1940-45 average	1946-50 average	1951 (adjusted)	1951*	1955	1956	1957
15- .. ..	12.0	12.1	11.1	13.8	14.6	15.0	16.6	19.2	20.5
20- .. ..	37.1	35.6	36.5	46.9	42.8	46.3	50.2	56.0	58.1
25- .. ..	27.6	26.6	34.5	45.1	38.7	41.6	41.4	44.5	47.7
30- .. ..	16.0	15.8	23.2	33.0	30.6	32.1	29.2	33.7	35.9
35- .. ..	10.6	10.0	13.0	18.2	17.0	17.5	16.7	18.5	19.8
40- .. ..	4.2	4.0	5.2	5.9	5.7	5.8	5.7	6.0	6.2
15-44 .. ..	19.8	19.0	20.8	26.8	24.7	26.2	26.7	29.8	31.3
<i>Ratio to 1938:</i>									
Crude .. ..	1.00	0.96	1.05	1.35	1.25	1.32	1.35	1.51	1.58
Standardised by age	1.00	0.98	1.07	1.38	1.29	1.36	1.43	1.60	1.68

\* Adjusted on 1952 duration basis.

The highest rates are for women aged 20-24, followed by those aged 25-29. The rates are appreciably higher than before the war, but it should be noted that this is not true of the total numbers of such maternities, which are slightly lower—the proportion of unmarried persons in the younger age-groups of the population has fallen greatly.

There is a more detailed discussion on pages 19-21 of the 1955 Commentary.

### Legitimate births and fertility

#### Age of mother and duration of marriage

The total numbers of legitimate births and the corresponding rates per 1,000 married women aged 15-44 were shown above in Tables V and VI. But fertility declines with advancing age of mother and with lengthening duration of marriage, and for a proper assessment of it these factors must be taken into account.

Table II in Part II classifies the year's legitimate maternities (to women married once only) by age of mother at maternity and the duration of her marriage. Corresponding rates, based on the estimated years of married life spent in the calendar year as shown in Table JJ, are given in Table KK.†

An alternative classification of the maternities, by age at marriage and year of marriage, is given in Table MM‡; the corresponding mean numbers exposed to risk are given in Table NN and rates in Table OO. These last two tables were modified in 1956 from the form used in 1952 to 1955. They now relate to the integral duration intervals (from one wedding anniversary to the next)

† To obtain equivalent birth rates they should be multiplied by the appropriate ratio of births to maternities.

‡ Table MM also shows number of previous children.

ended in e.g. 1957, spanning two calendar years of risk, instead of an integral calendar year of risk, spanning two duration intervals. Table OO was also adjusted from maternity rates to live birth or fertility rates. It continues Tables 2(a)-(g) of Appendix A to the 1955 Commentary. Table PP now shows mean family size (liveborn children) at integral durations (wedding anniversaries) reached in the calendar year, by calendar year of marriage and age at marriage, and continues Tables 1(a)-(g) of the same Appendix.

The rates combining marriage duration with age at maternity are summarised in Table XI. It shows the typical pattern of decline with increasing age, as well as with each year of duration after the first†. The incidence of pre-marital conceptions, conventionally measured by the rates for durations under 9 months, is also highest at ages under 20 (where the maternity rate is as high as for the remaining quarter of the first year), falls steeply to the next age-group (20-24) and more slowly thereafter.

**Table XI. Legitimate maternity rates for women married once only by age and marriage duration, 1952 to 1957, England and Wales\***

Age of married woman	Year	Marriage duration (completed years)										
		All durations	0-	1-	2-	3-	4-	5-9	10-14	15-19	20-24	25 and over
All ages under 50	1952-54	·089	·278	·258	·222	·203	·181	·115	·049	·019	·007	·001
	1955	·088	·279	·257	·219	·203	·186	·115	·047	·019	·006	·001
	1956	·092	·292	·267	·230	·215	·192	·122	·051	·020	·006	·001
	1957	·094	·300	·274	·237	·220	·201	·127	·053	·021	·006	·001
Under 20	1952-54	·408	·457	·311	·323	·354	—	—	—	—	—	—
	1955	·391	·433	·305	·310	·350	—	—	—	—	—	—
	1956	·406	·454	·314	·315	·333	—	—	—	—	—	—
	1957	·408	·453	·329	·317	·356	—	—	—	—	—	—
20-24	1952-54	·252	·272	·278	·247	·235	·220	·200	—	—	—	—
	1955	·249	·269	·273	·238	·233	·221	·207	—	—	—	—
	1956	·259	·277	·283	·250	·245	·229	·217	—	—	—	—
	1957	·263	·281	·288	·254	·248	·234	·218	—	—	—	—
25-29	1952-54	·171	·236	·247	·215	·205	·189	·140	·110	—	—	—
	1955	·171	·243	·244	·217	·203	·194	·143	·102	—	—	—
	1956	·180	·247	·255	·226	·216	·199	·152	·113	—	—	—
	1957	·186	·265	·259	·235	·222	·211	·157	·118	—	—	—
30-34	1952-54	·101	·229	·236	·201	·185	·167	·107	·070	·065	—	—
	1955	·096	·234	·243	·197	·179	·167	·104	·063	·062	—	—
	1956	·100	·247	·245	·210	·190	·173	·110	·066	·063	—	—
	1957	·103	·257	·255	·218	·192	·180	·114	·069	·062	—	—
35-39	1952-54	·050	·168	·181	·148	·134	·126	·078	·043	·035	·039	—
	1955	·049	·166	·190	·150	·135	·128	·080	·042	·035	·035	—
	1956	·050	·175	·195	·152	·144	·132	·082	·045	·035	·035	—
	1957	·051	·184	·200	·158	·144	·130	·085	·046	·035	·036	—
40-44	1952-54	·015	·053	·064	·055	·050	·043	·029	·017	·012	·012	·009
	1955	·014	·055	·066	·052	·050	·046	·030	·016	·012	·011	·008
	1956	·014	·054	·075	·059	·049	·042	·030	·017	·012	·010	·008
	1957	·014	·067	·068	·056	·048	·044	·031	·018	·012	·010	·008
45-49	1952-54	·001	·005	·004	·004	·003	·003	·002	·002	·001	·001	·001
	1955	·001	·002	·002	·004	·004	·003	·003	·002	·001	·001	·001
	1956	·001	·003	·004	·005	·003	·002	·002	·001	·001	·001	·001
	1957	·001	·001	·004	·003	·003	·002	·002	·001	·001	·001	·001

\* In calculating these rates the few maternities to women whose stated age and marriage duration implied an age at marriage below the legal minimum of 16 have been excluded.

† The apparent exception at the longest durations within some of the lines, mainly that for age-group under 20, is due to the fact that as it approaches the right-hand edge of the table the group becomes confined to fewer single years of age, corresponding to the very youngest marriage ages. In this part of a detailed table by single years of age, fertility rates change more rapidly with marriage age than with duration, and the number of women at the individual ages making up the group increases very rapidly with age.



Table XI shows that the increase in maternity rates between 1956 and 1957 affected nearly all age and duration groups where the number of maternities is large enough for chance fluctuations not to obscure the picture. In general the increases between 1956 and 1957 were not as great as those between 1955 and 1956.

### Cohort analysis

An appreciation of fertility trends needs more than the examination of annual fertility rates. It is necessary to take a group of people, such as those born or married in a particular period, and to follow them through their reproductive lives, either by detailed records or by statistical computation which approximates to the same results. Such a group is generally called a *cohort*, and the study of fertility records in this form, *cohort analysis*. In this country the two types of group mentioned are often distinguished by referring to those born in the same period as a *generation*, and reserving the term *cohort* for those married in the same time interval.

Cohort analysis avoids the misleading impression made by the births of any one period such as a year when either family size or the timing of births is changing.

Tables of mean family sizes and fertility rates of women married once only were computed for each marriage cohort since 1920 and published in Appendix A of the 1955 Commentary. The mean family size tables show the average number of liveborn children reached after each single year of marriage duration. The fertility rate tables show the average annual additions by which family size has been built up. Both sets give figures for all women married under the age of 45 combined and for the separate marriage age-groups.\* The series is being kept up to date by Tables OO and PP.

The figures are discussed in detail in the 1951 *Census Fertility Report*.

Table XII and Diagram 1 show the mean ultimate family size of marriage cohorts since 1861. The earlier figures have been taken from data obtained at the 1911 Census of Population and the 1946 Sample Family Census of the Royal Commission on Population. Those from 1930 onwards have been projected, using alternative assumptions, from the position reached by the cohorts concerned in 1957. The first projected series assumes future fertility rates by marriage age and duration equal to the mean of those experienced in 1951-55, and the other (not shown in the diagram) uses similar rates equal to the mean of those experienced in 1956-57. The two assumptions give figures for mean ultimate family size which differ only slightly. The figures based on 1956-57 fertility are lower than the 1951-55 based figures for marriage cohorts before 1950 and higher for the 1951 and 1952 cohorts. This reflects the differences in the two sets of duration fertility rates as shown by the 20-24 age-group whose details appear below. The 1956-57 rates for this age-group are higher than those for 1951-55 at durations 0 to 9 but slightly lower for the longer marriage durations. On either basis the projected values are unlikely to be appreciably in error for marriages of 1941 or earlier. The element of projection (though not of course the margin of error) amounts to between 10 and 20 per cent of the total for marriages of 1944-47 and to 20 per cent or more from 1948 onwards when the figures gradually become more speculative.

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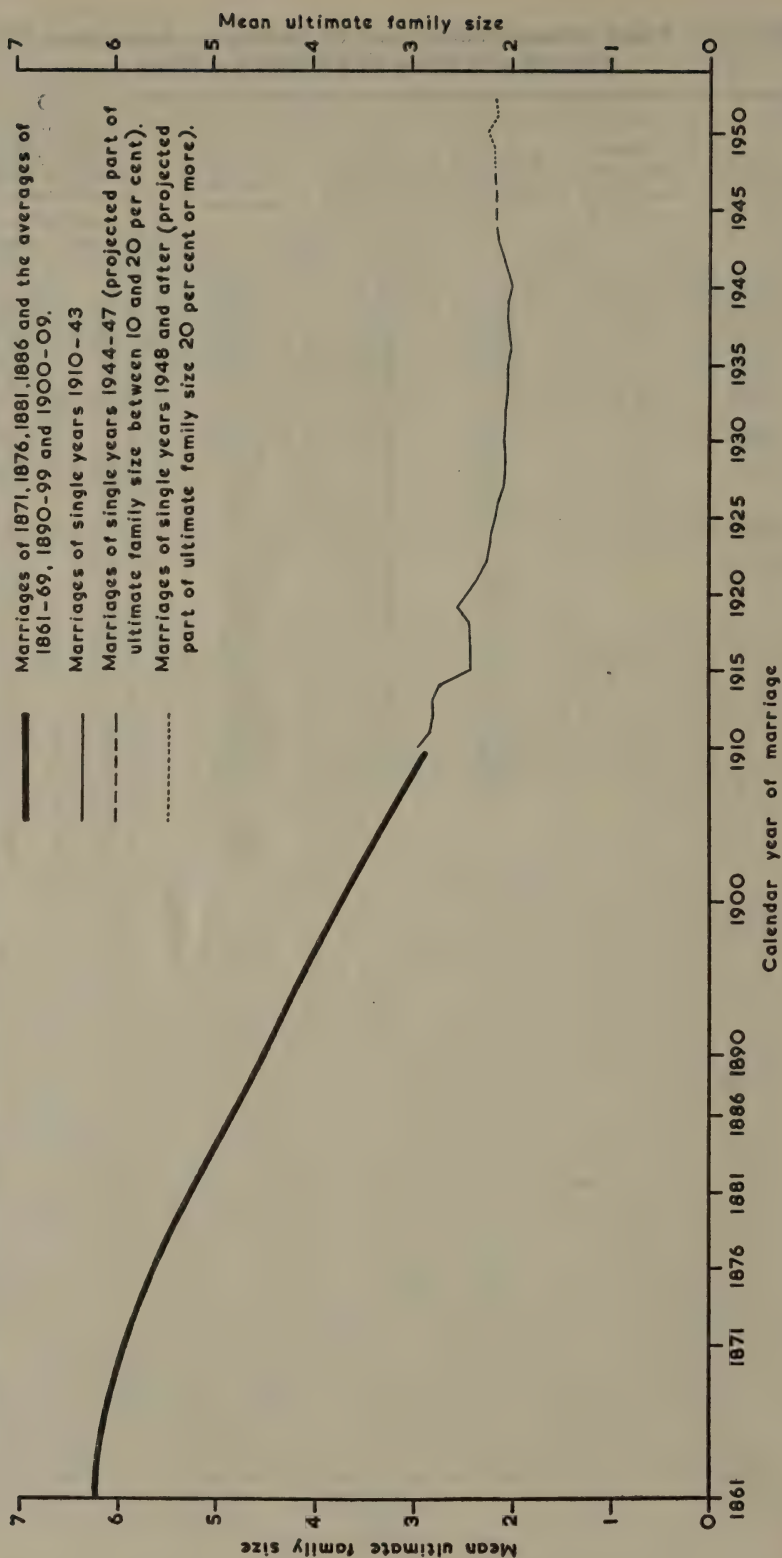
\* For the technical problems involved and the methods used see *Census 1951, England and Wales : Fertility Report*, Chapter IV, Appendix 1.

**Table XII. Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales**

Calendar year of marriage	Mean ultimate family size (actual)	Calendar year of marriage	Mean ultimate family size (actual)	Calendar year of marriage	Mean ultimate family size projected using fertility rates for	
					1951-55	1956-57
1861-69	6.16	1910	2.95	1930	2.09	2.09
		1911	2.83	1931	2.08	2.08
1871	5.94	1912	2.80	1932	2.08	2.08
		1913	2.81	1933	2.06	2.06
1876	5.62	1914	2.73	1934	2.04	2.04
1881	5.27	1915	2.43	1935	2.04	2.04
		1916	2.43	1936	2.01	2.01
1886	4.81	1917	2.44	1937	2.03	2.02
		1918	2.45	1938	2.06	2.06
1890-99	4.13	1919	2.57	1939	2.05	2.05
1900-09	3.30	1920	2.47	1940	2.00	1.99
		1921	2.38	1941	2.04	2.03
		1922	2.28	1942	2.09	2.07
		1923	2.23	1943	2.14	2.13
		1924	2.21	1944	2.18	2.17
		1925	2.17	1945	2.18	2.16
		1926	2.14	1946	2.18	2.17
		1927	2.09	1947	2.19	2.17
		1928	2.08	1948	2.19	2.18
		1929	2.08	1949	2.20	2.19
				1950	2.26	2.26
				1951	2.16	2.18
				1952	2.18	2.21



Diagram 1. Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales



**Sums of fertility rates  
Marriage age 20-24**

Duration of marriage (completed years)				Mean 1951-55	1956-57	Difference
<b>All durations</b> .. .. .				<b>2·175</b>	<b>2·265</b>	<b>+·090</b>
Before marriage .. .. .				0·033 *	0·033*	(—)
0-4 .. .. .				1·132	1·183	+·051
5-9 .. .. .				0·596	0·651	+·055
10-14 .. .. .				0·273	0·271	—·002
15-19 .. .. .				0·114	0·105	—·009
20 and over .. .. .				0·027	0·022	—·005

\* Assumed equal to marriages of 1945.

It is still too soon to say whether the recent rise in fertility rates is part of an upward trend in family size or merely reflects a change, not necessarily permanent, in the timing of births within marriage.

**Generation replacement rates.**—Earlier in this chapter the conventional net reproduction rates have been shown and their limitations mentioned. Briefly, they are a convenient summary of the events of a year, but an unsatisfactory guide to long term prospects. They may be improved by taking explicit account, in their calculation, of marriage as well as of fertility and mortality. But even reproduction rates refined in this way, if they relate to a year or similar period, are subject to distortions and fluctuations when the time-pattern of family building is changing, though ultimate family size may be constant.

It is a different matter if cohort analysis has indicated that certain sets of fertility and marriage rates represent a stable pattern which may reasonably be taken to summarise the habits of the generations and marriage cohorts now passing through the reproductive period. Such seems to have been the case in recent years, at least before the rise in births since 1956. A replacement rate was therefore calculated on the basis of the age-duration fertility rates and the marriage rates of 1951-55, and the mortality experience of 1950-52 as represented by the English Life Tables No. 11†, which estimated the ultimate implications of the persistence of current habits for the replacement of the population. It came to 1·01 for females. The male rate‡, at about 1·06, was not very different. Using the marriage rates of 1957 would raise these replacement rates to about 1·07 for females and 1·11 for males. If marriage rates continue to rise, or if the fertility rates of 1957 were to continue indefinitely, there would be a further moderate increase. In short, in a population which consistently experienced the present high proportions marrying and low mortality, the family size indicated by current trends would be sufficient for replacement, perhaps with a small margin to spare.

It should be noted, however, that these figures result from a hypothetical calculation summarising current rates which have not yet been experienced throughout the lifetime of any single generation and represent a more favourable experience than that of the generations now nearing completion of their families. This is particularly true of mortality. The replacement rates of actual genera-

† *The Registrar General's Decennial Supplement, England and Wales, 1951: Life Tables.* London: Her Majesty's Stationery Office, 1957, price 3s. net.

‡ i.e., that calculated using the marriage rates of men.



tions since 1838-43 were shown and discussed in the 1956 Commentary (pages 23-24). The number of female births to the earliest of these generations of women, the last before the spread of family limitation, was about 40 per cent above replacement level. Then it declined until, for the 1903-08 generation, it was 30 per cent short of the number needed for replacement. Since then it has been rising vigorously and, if present trends continue, will reach replacement with the generation born in 1943-48, a hundred years after the decline set in (or a little earlier if marriage rates continue above the 1951-55 level).

But the rise has been slowing down, and there are no clear indications at present that it will carry the rate very much higher than unity. The reason is that the greater part of the recovery in the replacement rates since the 1903-08 generation has been due to improved mortality (mainly in infancy) and higher marriage rates, and in both these respects there is now relatively little scope for further improvement.

### Birth order

The legitimate maternities of the year are tabulated by birth order as well as mother's age at maternity in Table HH. In 1957, 40 per cent of the total were first births, 30 per cent second, 15 per cent third and 15 per cent fourth or later births. In Table LL the first maternities among these are further subdivided by duration of marriage.

Table MM gives a threefold classification by mother's age at marriage, duration of marriage and birth order. It makes it possible to investigate the share of births of different orders in the recent rise in fertility rates. True birth order rates would relate, say, the second maternities of mothers married in 1953 at age 20-24 to the estimated number of women in that group who have so far had one child. But it has not so far been possible to carry out the considerable work of making a series of such estimates in line with those of mean family size in the 1955 Commentary. In the meantime a series of rates has been computed relating the live births\* of each calendar year from 1952 to 1957, classified by birth order, to *all* the married women of the same marriage year and marriage age as the mothers concerned. In effect the marriage age / cohort rates of Table OO (style of 1952-55, but live births) have been subdivided by birth order in proportion to Table MM. The rates for 1957 are shown in Appendix A on pages 224-225 and those for 1952-56 were published in Appendix A to the 1956 Commentary. The rates for all ages under 45 combined are means of the age rates weighted by the original number of spinster marriages in each cohort and age-group. Index numbers of these all-ages rates are given in Table XIII.

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\* Maternities converted by the appropriate coefficients.

**Table XIII. Ratios of fertility rates by birth order (live births per woman married once only, irrespective of parity) to those of 1952 taken as 100: 1952 to 1957, England and Wales**

All marriage ages under 45

Note. Calculated from rates in Appendix A for 1957, and Appendix A of the 1956 Commentary (1952-56), taken to 4 or 5 decimal places.

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
$\frac{1}{2}$	1952	1952	100			100		
	1953	1953	102			102		
	1954	1954	103			103		
	1955	1955	102			102		
	1956	1956	106			106		
	1957	1957	110			110		
1	1951	1952	100	100		100		
	1952	1953	102	102		108		
	1953	1954	102	102		110		
	1954	1955	102	102		114		
	1955	1956	106	105		118		
	1956	1957	109	108		128		
2	1950	1952	100	100	100		100	
	1951	1953	97	98	96		88	
	1952	1954	95	94	99		83	
	1953	1955	95	93	101		88	
	1954	1956	99	96	104		92	
	1955	1957	102	98	111		98	
3	1949	1952	100	100	100		100	
	1950	1953	107	112	107		96	
	1951	1954	102	107	101		88	
	1952	1955	103	104	104		92	
	1953	1956	108	111	109		94	
	1954	1957	109	110	111		100	
4	1948	1952	100	100	100	100	100	
	1949	1953	104	107	103	101	96	
	1950	1954	108	112	108	102	95	
	1951	1955	103	110	104	96	82	
	1952	1956	110	117	110	102	89	
	1953	1957	114	123	113	107	98	
5	1947	1952	100	100	100	100	100	
	1948	1953	106	114	106	99	103	
	1949	1954	106	117	103	102	102	
	1950	1955	114	127	112	108	106	
	1951	1956	112	134	111	101	99	
	1952	1957	117	140	114	107	107	
6	1946	1952	100	100	100	100	100	100
	1947	1953	104	112	107	99	98	95
	1948	1954	105	123	104	98	98	104
	1949	1955	105	125	105	96	100	107
	1950	1956	120	151	119	111	108	114
	1951	1957	117	156	116	106	98	101



Table XIII—continued

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
7	1945	1952	100	100	100	100	100	100
	1946	1953	104	105	100	104	105	118
	1947	1954	104	113	99	101	106	121
	1948	1955	103	123	99	96	103	122
	1949	1956	108	131	104	100	108	123
	1950	1957	125	159	119	115	120	141
8	1944	1952	100	100	100	100	100	100
	1945	1953	104	110	105	106	102	94
	1946	1954	105	118	100	103	110	109
	1947	1955	104	122	99	99	107	114
	1948	1956	111	146	107	103	108	119
	1949	1957	114	154	110	105	111	123
9	1943	1952	100	100	100	100	100	100
	1944	1953	100	89	98	100	102	108
	1945	1954	100	100	97	99	101	108
	1946	1955	99	93	91	97	104	117
	1947	1956	105	115	101	98	107	122
	1948	1957	111	131	104	104	108	131
10	1942	1952	100	100	100	100	100	100
	1943	1953	100	92	93	98	111	111
	1944	1954	96	83	83	96	109	119
	1945	1955	93	92	82	90	103	114
	1946	1956	99	95	84	92	111	132
	1947	1957	105	111	91	96	113	141
11	1941	1952	100	100	100	100	100	100
	1942	1953	106	96	105	108	107	108
	1943	1954	100	83	89	97	109	121
	1944	1955	96	81	79	92	106	125
	1945	1956	100	85	85	96	108	129
	1946	1957	103	89	83	97	112	139
12	1940	1952	100	100		100	100	100
	1941	1953	104	99		105	104	109
	1942	1954	104	98		103	109	111
	1943	1955	99	84		95	104	123
	1944	1956	102	81		96	110	136
	1945	1957	105	87		99	109	135
13	1939	1952	100	100		100	100	100
	1940	1953	101	111		106	99	87
	1941	1954	104	110		109	103	93
	1942	1955	102	104		102	105	98
	1943	1956	103	100		98	105	109
	1944	1957	106	97		102	107	119
14	1938	1952	100	100		100	100	100
	1939	1953	107	111		122	110	93
	1940	1954	105	119		123	109	84
	1941	1955	106	114		123	106	89
	1942	1956	114	120		129	115	100
	1943	1957	115	113		124	118	109

Table XIII—continued

Mean marriage duration (years)	Calendar year of marriage	Calendar year of maternity	Number of previous children					
			Total	0	1	2	3	4 and over
15	1937	1952	100	100		100	100	100
	1938	1953	98	92		106	96	96
	1939	1954	101	100		115	109	91
	1940	1955	104	118		123	107	86
	1941	1956	107	116		123	112	93
	1942	1957	116	131		130	120	99
16	1936	1952	100	100		100	100	100
	1937	1953	100	92		102	113	97
	1938	1954	99	89		115	107	93
	1939	1955	103	103		119	113	93
	1940	1956	103	114		130	113	84
	1941	1957	109	116		134	120	91
17	1935	1952	100		100		100	100
	1936	1953	97		100		100	95
	1937	1954	96		95		103	94
	1938	1955	93		93		103	90
	1939	1956	104		116		119	91
	1940	1957	105		131		119	85
18	1934	1952	100		100			100
	1935	1953	99		100			98
	1936	1954	99		107			96
	1937	1955	96		98			95
	1938	1956	95		95			95
	1939	1957	107		124			100
19	1933	1952	100		100			100
	1934	1953	99		107			95
	1935	1954	97		107			92
	1936	1955	94		107			86
	1937	1956	96		109			88
	1938	1957	99		120			87
20	1932	1952	100			100		
	1933	1953	96			96		
	1934	1954	91			91		
	1935	1955	88			88		
	1936	1956	81			81		
	1937	1957	83			83		
21	1931	1952	100			100		
	1932	1953	107			107		
	1933	1954	97			97		
	1934	1955	84			84		
	1935	1956	83			83		
	1936	1957	81			81		
22	1930	1952	100			100		
	1931	1953	93			93		
	1932	1954	102			102		
	1933	1955	84			84		
	1934	1956	81			81		
	1935	1957	77			77		

When the births are so finely subdivided there are bound to be many small numbers subject to chance fluctuations. In Table XIII births of different orders have therefore been grouped together in such a way that the corresponding cells in Table MM for 1957 contained at least 1,000 maternities. Even so there are quite a few cells where no significance can be attached to very small movements in the index numbers.

It is clear from Table XIII that the rise in rates in 1957 compared with 1956 affected not only all durations up to about 20 years, but also all birth orders. Taken by and large, moreover, there does not seem to have been much variation between different birth orders in the proportional increases of rates. The picture is similar for individual marriage age-groups under 35 ; after that age the data are rather sparse and the movement of the rates shows no consistent change.

The sustained rise in first birth rates within each duration from 4 to 8 years is likely to be due to the large number of births which took place just after the war: if women married then had their first children more quickly after marriage than later cohorts fewer of them would be still childless at duration 5 or 6 (say). That would cause their rates in Appendix A of this and the 1956 volume to be smaller than those of the following cohorts, even if their true birth order rates at those durations were the same.

Keeping this qualification in mind it may be noted that over the period as a whole there seems to have been some tendency for first and fourth and higher order birth rates to rise, but not for second and third birth rates. This applies to the first ten or eleven years of marriage only.

### **Birth occurrences and registration time lag**

The statutory period allowed for registration of either a live birth or a still-birth is 42 days and as a consequence there has generally been an appreciable time lag between the occurrence of a birth and its registration. In the past the time lag has been found to decrease markedly after the introduction of an incentive to register earlier, for example, by the dependence of the issue of food ration books and Family Allowances upon birth registration. Conversely, registration has become more tardy when such incentives have been removed or have become less compelling. In 1957 the average time lag between occurrence of a birth and registration was about twelve days.

The importance of time lags arises from their influence on the difference between the number of births registered in a period and the number occurring in that period. Occurrences are usually the more appropriate statistics for fertility measurement, but registrations are available sooner. The difference between the two is influenced by the time lag in two ways. A difference will occur, even though the time lag be constant, if birth incidence is changing ; and also, even though birth incidence be constant, if the time lag is changing. In practice both factors operate. The combined effect of these factors may be measured by the ratio of occurrences to registrations, which in 1957 was 1.0001.

### **Seasonal incidence of births**

The number of live births is normally greatest in the second quarter of the year and smallest in the fourth quarter. This is illustrated by Table XIV, based on Table D in Part II. Table XIV also shows that the seasonal cycle is similar for legitimate and illegitimate births, but usually with somewhat wider swings for the illegitimate.



**Table XIV. Ratio of quarterly births to average quarterly births taken as 100:  
1939, 1949-53 and 1957, England and Wales**

Period	1939	1949-53 average	1957
All live births			
1st Quarter ..	100	102	100
2nd " ..	106	105	104
3rd " ..	101	100	99
4th " ..	93	93	97
Year ..	400	400	400
Legitimate live births			
1st Quarter ..	99	102	100
2nd " ..	106	105	104
3rd " ..	101	100	99
4th " ..	94	93	97
Year ..	400	400	400
Illegitimate live births			
1st Quarter ..	105	104	101
2nd " ..	107	107	103
3rd " ..	100	98	99
4th " ..	88	91	97
Year ..	400	400	400
Legitimate stillbirths			
1st Quarter ..	104	105	103
2nd " ..	104	104	102
3rd " ..	98	96	98
4th " ..	94	95	97
Year ..	400	400	400

The seasonal variation in the number of stillbirths is the product of two factors, the variation of births and that of stillbirth rates. The first of these has much the greater influence, but operates something like a month in advance because the average period of gestation is shorter for stillbirths than for live births. Hence the distribution resembles that of live births, but anticipates it slightly, with the result that the first quarter has the largest numbers.

The monthly birth figures in Table TT allow a more detailed study. The varying length of calendar months can be allowed for by using daily averages. The ratios of these averages in each month to those for the calendar year are given in Table XV.

**Table XV. Monthly birth incidence in relation to the average for the calendar year, 1939, 1951-54, 1956 and 1957, England and Wales**

Month of occurrence	Ratio of monthly daily average to that of the calendar year taken as 1,000											
	Legitimate live births				Illegitimate live births				Legitimate stillbirths			
	1939	1951-54	1956	1957	1939	1951-54	1956	1957	1939	1951-54	1956	1957
January ..	980	990	989	975	1,076	994	971	974	1,043	1,043	987	1,024
February ..	995	1,038	1,016	1,029	1,041	1,053	975	1,058	1,045	1,081	1,130	1,064
March ..	1,041	1,066	1,080	1,054	1,080	1,082	1,050	1,029	1,078	1,076	1,082	1,048
April ..	1,073	1,060	1,066	1,044	1,046	1,088	1,085	1,044	1,068	1,080	1,031	1,042
May ..	1,078	1,072	1,043	1,055	1,138	1,096	1,045	1,011	1,060	1,031	1,052	1,084
June ..	1,043	1,037	1,012	1,025	1,044	1,060	1,079	1,047	1,002	993	1,005	951
July ..	1,025	1,011	1,004	975	1,038	1,018	989	993	984	963	961	1,001
August ..	985	969	968	964	960	935	967	966	972	940	990	954
September ..	1,004	992	1,002	1,009	969	969	975	988	963	933	934	950
October ..	939	932	942	986	859	882	942	988	938	944	931	1,009
November ..	914	906	921	932	853	891	923	926	932	947	989	908
December ..	927	931	956	955	898	938	1,000	979	917	973	916	965

For live births the table shows that the daily average is normally at a minimum in November, then rises sharply until March, remains high until May or June and then declines again except for a minor rise in September (corresponding to Christmas marriages).

Stillbirths tend to be relatively numerous in January to May and relatively rare in July to December, corresponding to the distribution of live births about a month later. Their ratios fluctuate more from one year to another than those of live births, mainly because of their small numbers. The seasonal variation in stillbirth rates is shown by Table XVI, which relates the average daily number of stillbirths in each calendar month to the sum of that number and of the corresponding number of live births one month later.

**Table XVI. Stillbirth rates by calendar month (see text), 1939, 1951-54, 1956 and 1957, England and Wales**

*The ratios were calculated before rounding off the rates*

Month of occurrence of stillbirth	Rate per 1,000 total births (live and still)				Ratio to calendar year rate taken as 1,000			
	1939	1951-54	1956	1957	1939	1951-54	1956	1957
<b>Year</b>	<b>38·1</b>	<b>22·9</b>	<b>22·8</b>	<b>22·5</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>
January ..	39·9	23·0	22·4	23·5	1,045	1,006	980	1,048
February ..	38·0	23·1	23·9	23·3	998	1,008	1,046	1,037
March ..	38·0	23·3	23·1	22·4	998	1,017	1,012	998
April ..	38·0	23·1	22·5	22·4	997	1,006	984	1,000
May ..	38·6	22·8	23·6	23·1	1,013	994	1,035	1,027
June ..	37·1	22·6	23·1	20·8	973	986	1,013	927
July ..	38·2	22·9	22·8	23·0	1,002	999	999	1,026
August ..	36·7	21·8	22·5	22·3	962	950	984	993
September ..	39·5	23·0	22·8	20·9	1,036	1,003	998	932
October ..	39·0	23·7	23·3	22·9	1,023	1,037	1,019	1,019
November ..	38·4	23·2	23·4	21·9	1,007	1,013	1,025	976
December ..	36·3	22·6	20·8	22·8	953	985	911	1,017

It is clear that stillbirth rates calculated on something like the true exposed to risk vary very little with the seasons\*, hardly more than they do by chance as a result of small numbers. The seasonal variation is, however, statistically significant when numbers are increased by combining the four years 1951-54 ( $\chi^2 = 24.0$  with 11 degrees of freedom,  $P \approx .01$ ). The numbers in the individual years shown, including 1939, are too small to show either significant seasonal variation or a significant difference from the seasonal pattern for all seven years combined. The rates tend to be highest in October and lowest in August.

The seasonal pattern of ratios to the calendar year average such as those in Table XV is distorted when the trend is not level and particularly when it changes abruptly, as it did in the spring of 1955. Diagram 2 shows the average daily number of legitimate live births in each calendar month of the years 1954 to 1957 together with the estimated trend†.

**Table XVII. Monthly incidence of legitimate live births in relation to the trend, 1954 to 1957, England and Wales**

*The ratios were calculated before rounding off the mean numbers*

Month of occurrence		Mean number of legitimate live births per day								Ratio of actual to trend value			
		Actual				Trend							
		1954	1955	1956	1957	1954	1955	1956	1957	1954	1955	1956	1957
January	..	1,754	1,763	1,802	1,841	1,776	1,732	1,797	1,844	0.987	1.018	1.003	0.998
February	.. ..	1,856	1,748	1,851	1,941	1,773	1,727	1,803	1,852	1.047	1.012	1.027	1.048
March	.. ..	1,875	1,834	1,968	1,990	1,769	1,725	1,810	1,861	1.060	1.063	1.088	1.069
April	.. ..	1,847	1,820	1,941	1,971	1,765	1,724	1,816	1,870	1.046	1.055	1.069	1.054
May	.. ..	1,896	1,810	1,899	1,991	1,762	1,726	1,821	1,880	1.076	1.049	1.043	1.059
June	.. ..	1,801	1,792	1,845	1,935	1,759	1,731	1,824	1,890	1.024	1.035	1.011	1.024
July	.. ..	1,763	1,750	1,830	1,840	1,756	1,739	1,826	1,897	1.004	1.006	1.002	0.970
August	.. ..	1,681	1,677	1,764	1,819	1,753	1,748	1,828	1,905	0.959	0.959	0.965	0.955
September	.. ..	1,730	1,722	1,826	1,904	1,750	1,758	1,829	1,909	0.989	0.980	0.999	0.997
October	.. ..	1,665	1,664	1,717	1,861	1,747	1,769	1,831	1,912	0.953	0.941	0.938	0.973
November	.. ..	1,618	1,642	1,677	1,758	1,743	1,780	1,834	1,913	0.928	0.923	0.915	0.919
December	.. ..	1,631	1,708	1,742	1,802	1,738	1,790	1,838	1,914	0.938	0.954	0.948	0.941

When seasonal variations are eliminated it can be seen that the number of births declined slowly until about April 1955 and then turned sharply upwards. It continued to increase throughout 1956 and 1957, rising more steeply in the first part of 1957 than in the second.

The ratios of average daily births in each month to the trend values are given in Table XVII. They provide a more accurate measure than those in Table XV, and show that most of the recent apparent reduction in the seasonal swing compared with earlier years was due to the varying direction of the trend.

### Sex ratio at birth

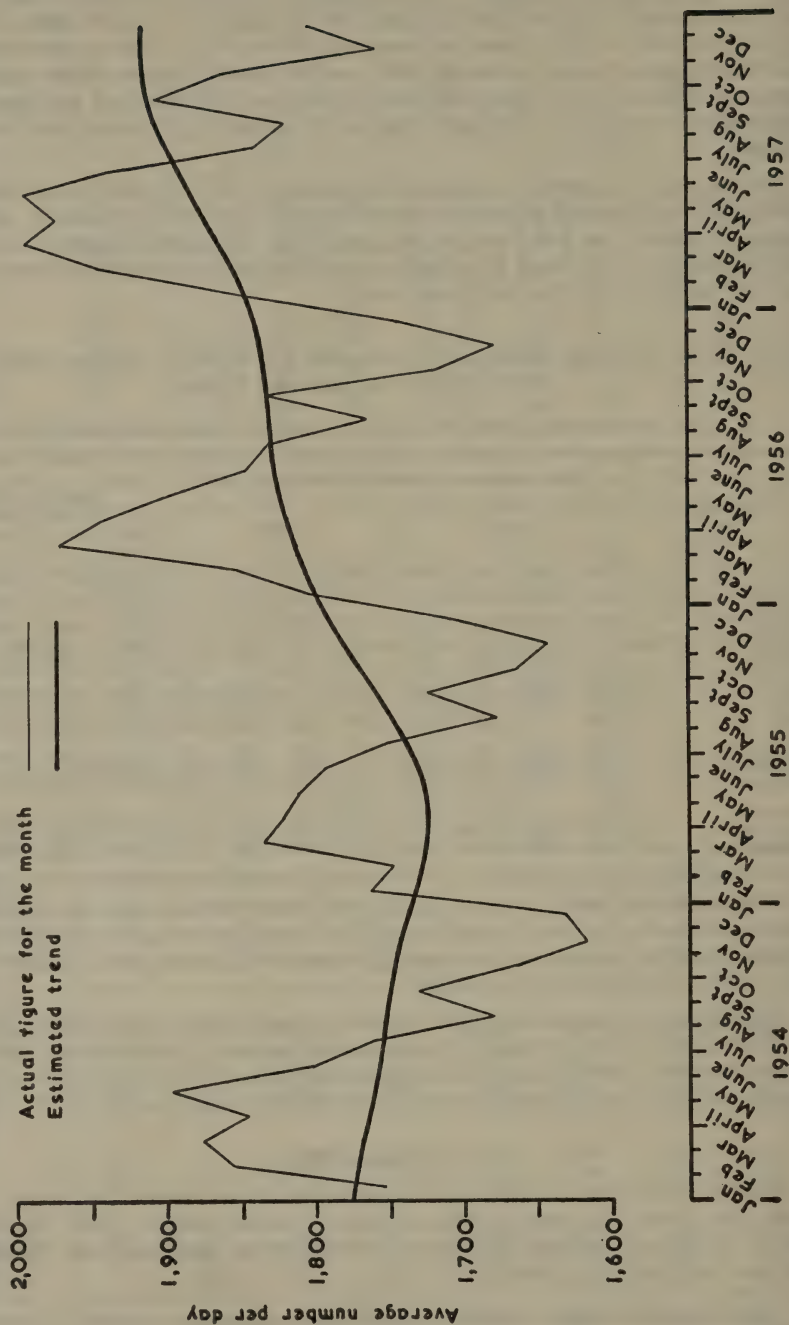
In 1957 there were 1,060 male live births per 1,000 female live births. This ratio was about the same as the average of recent years. Serial records are shown in Table C of Part II and separate figures for legitimate and illegitimate live and still births in Table XVIII.

\* Their variance is about a quarter of that of rates calculated on the basis of total births occurring in the same calendar month as the stillbirths.

† The trend has been estimated by adjusting a twelve-month moving average by hand so as to smooth it and to improve the balance of positive and negative deviations.



Diagram 2. Monthly incidence of legitimate live births in relation to the trend, 1954 to 1957, England and Wales



**Table XVIII. Male births per 1,000 female births, by legitimacy and whether live or still, 1928 to 1957, England and Wales**

Period	Legitimate births			Illegitimate births		
	Live	Still	Live and still	Live	Still	Live and still
1928-30 ..	1,044	1,231	1,051	1,037	1,280	1,049
1931-35 ..	1,051	1,207	1,057	1,044	1,153	1,049
1936-40 ..	1,054	1,183	1,059	1,050	1,117	1,054
1941-45 ..	1,061	1,158	1,064	1,074	1,173	1,078
1946-50 ..	1,061	1,169	1,063	1,056	1,238	1,061
1951-55 ..	1,059	1,126	1,060	1,061	1,229	1,066
1956 ..	1,057	1,108	1,058	1,055	1,049	1,055
1957 ..	1,061	1,081	1,061	1,049	1,002	1,047

The generally rising trend in the proportion of boys among births in the present century can be attributed to the continuous reduction in foetal mortality. This was discussed in more detail in the Commentaries for previous years, and the influence of mother's age in the Civil Text Volume for 1946-50.

### Multiple births

Of the 730,524 maternities in 1957 there were 9,371 with multiple births—9,273 with twins, 95 with triplets and 3 with quadruplets. They produced 17,902 live and 941 stillborn children. Details are given in Tables CC and DD.

The number of multiple maternities in a single year is too small for detailed study ; the figures would be too much affected by chance fluctuations. A detailed analysis appeared in the 1956 Commentary, pages 33-42.

### Birth rates in different parts of the country

The number of live births by sex and legitimacy and the crude birth rates for all administrative areas in England and Wales together with summary figures for regions, conurbations and urban/rural aggregates are shown in Table E. This table also shows for each area an Area Comparability Factor\* by which the crude birth rates can be standardised for the sex and age structure of the local population, and the ratio of the local rate thus adjusted to the national birth rate. Table XIX shows live birth rates and the ratio of the local to the national birth rate for each standard region, conurbation and urban/rural aggregate.

\* For a detailed description of the birth A.C.F.s see the *Statistical Review* for 1954, Part III, Commentary, pages 30-31. As from 1957 the A.C.F.s there described have been further adjusted to allow for the presence in some areas of women of childbearing age in mental and mental deficiency hospitals where they are not 'exposed to risk' of childbearing.

**Table XIX. Birth rates in standard regions, conurbations and urban and rural aggregates, 1957**

*All the ratios were calculated before rounding off the rates*

Area	All live births				Ratio of proportion married among females 15-44 to national proportion as at 1951 Census	Illegitimate live births	
	Crude rate per 1,000 Home population	Adjusted birth rate	Ratio of local to national rate			Crude rate per 1,000 Home population	Ratio of local to national rate
			Crude	Adjusted			
ENGLAND AND WALES .. ..	16.1	16.1	1.00	1.00	1.00	0.77	1.00
Regions and conurbations:							
Northern .. .. .	18.2	17.9	1.13	1.11	0.99	0.67	0.87
Tyneside Conurbation .. ..	18.4	17.5	1.14	1.09	0.98	0.70	0.91
Remainder of Northern .. ..	18.1	18.0	1.13	1.11	1.00	0.66	0.86
East and West Ridings .. ..	16.4	16.4	1.02	1.02	1.03	0.76	0.99
West Yorkshire Conurbation ..	16.0	16.2	0.99	1.00	1.02	0.88	1.14
Remainder of East and West Ridings	16.7	16.7	1.04	1.04	1.04	0.67	0.87
North Western .. .. .	16.8	16.8	1.04	1.04	0.99	0.79	1.03
South East Lancashire Conurbation	16.5	16.4	1.03	1.02	1.01	0.92	1.19
Merseyside Conurbation .. ..	19.9	19.1	1.24	1.19	0.92	0.93	1.21
Remainder of North Western ..	15.4	15.9	0.96	0.99	1.00	0.61	0.79
North Midland .. .. .	16.5	16.5	1.03	1.03	1.05	0.78	1.01
Midland .. .. .	16.7	16.2	1.03	1.00	1.03	0.77	1.00
West Midlands Conurbation .. ..	16.7	15.7	1.04	0.98	1.02	0.87	1.13
Remainder of Midland .. .. .	16.6	16.6	1.03	1.03	1.03	0.67	0.87
Eastern .. .. .	16.6	16.6	1.03	1.03	1.02	0.72	0.94
London and South Eastern .. ..	14.6	14.2	0.91	0.88	0.97	0.86	1.12
Greater London .. .. .	14.7	13.8	0.91	0.86	0.97	0.93	1.21
Remainder of South Eastern ..	14.6	15.5	0.91	0.96	0.97	0.67	0.87
Southern .. .. .	16.3	17.0	1.01	1.05	1.00	0.83	1.08
South Western .. .. .	15.3	16.3	0.95	1.01	1.00	0.69	0.90
Wales (including Monmouthshire) ..	15.9	16.3	0.99	1.01	0.99	0.55	0.71
Wales I (South East) .. ..	16.4	16.2	1.02	1.01	1.01	0.53	0.69
Wales II (remainder) .. ..	14.8	16.0	0.92	1.00	0.94	0.58	0.75
Urban/Rural aggregates:							
Conurbations .. .. .	16.0	15.3	0.99	0.95	0.98	0.90	1.17
Areas outside conurbations:							
Urban areas with populations of 100,000 and over .. .. .	16.3	16.2	1.01	1.00	1.01	0.87	1.13
Urban areas with populations of 50,000 and under 100,000 .. ..	15.8	15.8	0.98	0.98	1.01	0.76	0.99
Urban areas with populations under 50,000 .. .. .	16.3	16.5	1.01	1.02	1.01	0.63	0.82
Rural districts .. .. .	16.1	17.1	1.00	1.06	1.01	0.61	0.79

The standardisation effected by the use of the A.C.F. allows only for the varying proportion of women of childbearing age in the local population. It does not take account of the proportion of these women who are married, as would be necessary if the fertility of married women in different areas is to be compared. A more detailed analysis of this sort was made in the 1956 Commentary (pages 43-47). In most of the areas shown in Table XIX the difference made was small. Alternatively if the object is to compare birth increments to local populations the proportion married can be specially examined as a possible source of any birth variation which may be found. For this purpose Table XIX includes a column showing the ratio of the proportion married among women aged 15-44 to the national proportion as at the 1951 Census.



## All live births

Among the areas shown in Table XIX the Merseyside Conurbation has the highest birth rate ; the adjusted figure being nearly a fifth higher than that for England and Wales ; other areas having high birth rates are the two parts of the Northern Region, the Tyneside Conurbation and the remainder of the Northern Region. At the other extreme, the parts of the London and South Eastern Region (the Greater London Conurbation and the remainder of the Region) have the lowest birth rates, both crude and adjusted. In general the use of the A.C.F. adjustment makes little difference to the relative fertility of the areas identified in Table XIX. The main exceptions are Wales II, the South Western Region, the West Midlands Conurbation and the rural districts. The extreme rates in the areas quoted earlier are not accounted for by similar differences in the proportions married among females aged 15-44 ; in the Merseyside Conurbation the proportion is in fact rather lower than that for England and Wales. In several of the other areas high marriage proportions account for the birth rate being higher than the national figure.

In the urban/rural aggregates the crude rates vary little but the adjusted rates are roughly in reverse order of urbanisation, the rural districts having the highest rate and the conurbations the lowest rate. This gradient cannot be accounted for by differences in the proportions married.

## Illegitimate live births

Among the areas shown in Table XIX, Wales I has the lowest illegitimacy rate. The highest rates were in the Greater London and Merseyside Conurbations ; in the Merseyside Conurbation the high rate was associated with a low proportion married. The other conurbations (apart from Tyneside) and the Southern Region also had high rates. In the urban/rural aggregates there was a gradient from 0.90 per thousand home population in the conurbations to 0.61 in the rural districts.

## Stillbirths

The registration of stillbirths in England and Wales began on 1st July 1927, when the Births and Deaths Registration Act, 1926, came into operation. The *Statistical Reviews*, Part II, show numbers of stillbirths in England and Wales as a whole by quarters (Table D) and annually by sex and legitimacy (Table B). Table E1 gives annual numbers of stillbirths by sex and legitimacy for standard regions, conurbations, urban and rural aggregates, metropolitan and county boroughs, and administrative counties ; Table E gives the total numbers for all county districts. Under the Population (Statistics) Act, 1938, additional information has been collected at the registration of births, including stillbirths, and detailed tabulations of stillbirths by legitimacy and age of mother appear in the Fertility Analyses of Part II of the annual *Reviews*.

The stillbirth rate has remained fairly stable since 1949 in the neighbourhood of 23.0 per thousand total live and still births. The figures are shown in Table XVI on page 26. The effects of multiple maternities, age of mother and birth order were amply discussed in the Civil Text Volume for 1946-50, pages 141-144, where it was shown that the risk is much higher in multiple than in single births (especially at the younger ages of mother where the single birth risks are lower) ; is higher in male than in female births ; increases with age of mother except at the youngest ages ; and independently of age varies with parity, being highest at first births and lower at the second than at any other higher parity birth.

The seasonal incidence of stillbirths is discussed on pages 25-27, and the medical aspects on pages 74 ff and 197 ff.

## MARRIAGES

In 1957 there were 346,903 marriages contracted in England and Wales. Marriages and marriage rates for past years are given in serial form in Tables B and C of Part II and in Table D for calendar quarters. The summary in Table XX shows that the number of marriages was about 6,000 smaller than in 1956, but this was due to the smaller number of unmarried persons of marriageable age in the population. The crude marriage rate (15·4 persons marrying per 1,000 total population) declined fractionally compared with 1956. There was also a very slight decline in the male and female rates per 1,000 unmarried population aged 15 and over\* but only because of the changing age composition of that population. In about 90 per cent of all marriages the man is between the ages of 20 and 45 and in a similar proportion the woman is between 15 and 40, but in the unmarried population aged 15 and over these age-groups are only about 45 and 40 per cent respectively. If the number of marriages is related to the unmarried population in the age ranges mentioned the rates actually show a slight rise between 1956 and 1957 (from 157 to 158 per 1,000 for men, and from just under to just over 132 per 1,000 for women). Even the rates per 1,000 unmarried population aged 15 and over were still 15 and 10 per cent, respectively, higher than in 1938, and higher than the average for 1951-55.

**Table XX. Number of marriages and persons marrying per 1,000 total population of all ages and per 1,000 unmarried† population aged 15 and over, by sex, 1938 to 1957, England and Wales**

*The ratios were calculated before rounding off the rates*

Period	Marriages (thousands)	Per 1,000 total population		Per 1,000 unmarried† population aged 15 and over			
		Rate	Ratio to 1938 rate taken as 100	Males		Females	
				Rate	Ratio to 1938 rate taken as 100	Rate	Ratio to 1938 rate taken as 100
1938 ..	361·8	17·6	100	61·2	100	47·8	100
1939-50‡ ..	381·9	17·9	102	68·2	111	53·0	111
1951-55‡ ..	350·9	15·8	90	68·3	112	51·4	108
1956 ..	352·9	15·7	89	70·7	116	52·9	111
1957 ..	346·9	15·4	88	70·1	115	52·4	110

† Single, widowed and divorced.

‡ Annual averages.

### Marriage rates by sex, age and prior marital condition

The more detailed analysis in Tables H and XXI, showing marriage rates by sex, age and prior marital condition, confirms that the fall in the number of marriages was due to the smaller population at risk.

\* Though 16 is the minimum legal age for marriage, groupings beginning at age 15 are more convenient for making the necessary population estimates, for applying the rates to other population statistics and for international comparisons.

**Table XXI. Marriage rates by sex, age and prior marital condition, 1931 and 1938 to 1957, England and Wales**

*The ratios in columns 10 and 12 were calculated before rounding off the rates*

Year	Annual marriage rates per 1,000 in each age-group							Marriage rate per 1,000 population over 15	Ratio to correspond- ing rate for 1938 taken as 1,000	Marriage rate which would have resulted had the 1938 age rates been in operation	Ratio of actual marriage rate (col. 9) to rate in column 11 taken as 1,000
	15-	20-	25-	30-	35-	45-	55 and over				
1	2	3	4	5	6	7	8	9	10	11	12
<b>BACHELORS</b>											
1931	3.3	72.3	152.2	111.5	49.8	16.4	5.4	56.0	864	65.4	856
1938	3.2	87.0	176.8	127.5	57.0	18.5	4.8	64.8	1,000	64.8	1,000
1939-50	6.4	112.1	175.6	128.3	61.2	20.8	5.1	71.2	1,100	63.1	1,129
1951-55	6.7	132.1	172.5	107.7	49.1	18.2	5.1	70.8	1,093	60.7	1,167
1956	9.4	152.0	178.8	108.8	47.5	17.3	4.9	74.7	1,153	58.3	1,280
1957	10.6	155.2	174.8	109.4	46.8	16.5	4.9	74.3	1,147	57.5	1,292
<b>WIDOWERS AND DIVORCED MEN</b>											
1931	—	139.2	172.7	189.2	133.5	67.6	14.9	35.8	938	40.7	879
1938	—	153.6	174.5	248.0	152.6	79.1	15.9	38.1	1,000	38.1	1,000
1939-50	—	217.6	425.9	338.1	214.8	106.0	17.6	50.5	1,323	38.1	1,327
1951-55	—	133.7	406.8	318.8	206.4	117.2	19.7	55.2	1,447	40.3	1,370
1956	—	94.0	347.2	262.8	168.8	109.7	20.1	50.5	1,325	40.9	1,235
1957	—	75.5	289.4	255.9	157.6	105.3	20.1	48.4	1,270	40.9	1,186
<b>SPINSTERS</b>											
1931	17.1	106.8	119.1	57.2	21.3	7.9	2.2	51.7	842	68.4	756
1938	22.6	147.9	154.0	67.2	25.7	8.6	2.0	61.4	1,000	61.4	1,000
1939-50	36.8	191.1	153.3	72.8	28.9	10.2	2.0	69.5	1,132	56.5	1,230
1951-55	43.9	232.3	156.5	75.3	29.5	10.4	2.1	72.0	1,172	50.2	1,434
1956	54.4	262.7	163.1	79.9	30.9	10.4	2.1	77.3	1,259	47.3	1,633
1957	56.6	266.5	159.7	81.3	30.9	10.1	2.1	77.6	1,263	46.6	1,664
<b>WIDOWS AND DIVORCED WOMEN</b>											
1931	—	128.2	138.8	94.1	36.5	14.1	2.2	9.8	964	11.9	822
1938	—	197.1	172.4	114.2	50.1	14.7	2.5	10.2	1,000	10.2	1,000
1939-50	—	294.0	308.6	170.3	73.0	21.6	2.7	15.7	1,548	10.9	1,448
1951-55	—	403.0	355.6	188.2	84.2	29.3	3.0	16.1	1,581	9.5	1,682
1956	—	450.0	460.0	196.1	80.5	29.7	3.0	14.4	1,415	8.4	1,708
1957	—	425.7	472.7	186.3	77.6	29.9	3.0	13.6	1,340	8.1	1,670

This is brought out particularly by the comparison of the same rates in terms of index numbers in Table XXII and by Diagram 3. The rates continued to rise at the youngest ages, particularly for first marriages, and to remain high above the pre-war level except for bachelors over 25. There has been no change in the tendency for a larger proportion of people to get married at some time in their lives and for more of them to do so earlier. First marriage rates in the age-group under 20 have been climbing rapidly; the spinster rate in this group overtook that in the 35-44 group in 1937 (that in the narrower 35-39 group in 1941, and again in 1949 after a break in 1946-48) and is leaving it further and further behind.



**Table XXII. Ratios of marriage rates by sex, age and prior marital condition, to those of 1938 taken as 100: 1931 and 1939 to 1957, England and Wales\***

*All the ratios were calculated before rounding off the rates in Table XXI*

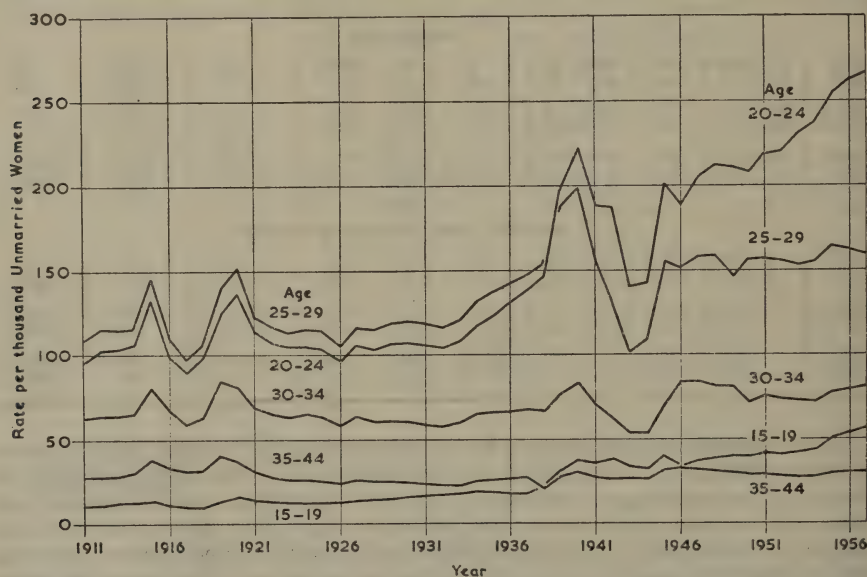
15-	20-	25-	30-	35-	45-	55 and over	All ages†	Period	15-	† 20-	25-	30-	35-	45-	55 and over	All ages†
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>BACHELORS</b>									<b>WIDOWERS AND DIVORCED MEN</b>							
100	83	86	87	87	89	114	86	1931	—	—	99	76	87	85	94	88
100	100	100	100	100	100	100	100	1938	—	—	100	100	100	100	100	100
198	129	99	101	107	113	107	113	1939-50	—	—	244	136	141	134	111	133
205	152	98	84	86	99	107	117	1951-55	—	—	233	129	135	148	124	137
290	175	101	85	83	94	103	128	1956	—	—	199	106	111	139	126	124
326	178	99	86	82	89	102	129	1957	—	—	166	103	103	133	126	119
<b>SPINSTERS</b>									<b>WIDOWS AND DIVORCED WOMEN</b>							
76	72	77	85	83	92	108	76	1931	—	65	81	82	73	96	89	82
100	100	100	100	100	100	100	100	1938	—	100	100	100	100	100	100	100
163	129	100	108	112	119	100	123	1939-50	—	149	179	149	146	146	109	145
195	157	102	112	115	122	103	143	1951-55	—	204	206	165	168	199	122	168
241	178	106	119	120	121	104	163	1956	—	228	267	172	161	201	122	171
251	180	104	121	120	118	104	166	1957	—	216	274	163	155	203	121	167

\* Some of the rates have been revised.

† Age-standardised.

‡ Based on small numbers.

**Diagram 3. Marriage rates§ of women by age, 1911 to 1957, England and Wales**



§ 1911-37: All marriages per 1,000 spinsters, widows and divorced women. 1938-57: First marriages per 1,000 spinsters.

A more detailed discussion of the trends in marriage rates in recent years can be found in the 1955 Commentary, pages 45-47, and in the marriage chapters of previous Commentaries.

**Marriages of minors.**—The tendency to younger marriage is naturally reflected in the proportion of brides and grooms who are under 21. For men it rose from 3·4 per cent in 1938 to 8·7 per cent in 1956 and 9·6 per cent in 1957, and for women from 16·4 per cent to 32·2 and 33·6 per cent, respectively, in the same years. These marriages were last discussed in detail in the 1954 Commentary, pages 38 and 39.

### Remarriages of widowed and divorced women

The marriages of widowed and divorced persons in Table XXI and its predecessors in earlier Commentaries have been combined because no separate population estimates for the calculation of rates were available. The two groups are, however, rather different and the proportion of the divorced in the combined total, considerably larger than before the war, is much higher at young ages than at older ones.

An attempt has therefore been made to compute some approximate marriage rates for the widowed and the divorced separately for years since 1951, in the first place for women. They are rather tentative estimates but probably give the right impression of the differentials and the general trend. The figures are shown in Table XXIII.

**Table XXIII. Marriage rates of widowed and divorced women by age, 1951 to 1957, England and Wales**

*Per 1,000 population in each group by age and condition*

Widows						Year	Divorced women					
20—	25—	30—	35—	45—	55 and over		20—	25—	30—	35—	45—	55 and over
171	165	113	56	22	3	1951	493	373	246	144	68	22
230	179	123	54	23	3	1952	549	430	251	144	74	21
220	197	112	56	23	3	1953	478	437	246	129	70	19
322	243	114	53	23	3	1954	443	452	241	120	62	18
321	324	133	55	24	3	1955	466	502	256	121	64	19
315	356	133	55	23	3	1956	496	516	249	115	61	17
305	366	132	52	23	3	1957	450	542	235	111	59	16

From these estimates it would seem that the marriage rates of divorced women are very much higher than those of widows of the same age. Even the latter are higher than the corresponding rates for spinsters in Table XXI; the only exceptions are the widows' rates in the age-group 20–24 in 1951 and 1953, since when they have risen steeply. At these ages, where spinster marriage rates rose throughout the seven years, those of widows rose even more rapidly, while those of divorced women actually fell a little on balance. But at ages 25–29, where the spinster rates have changed little, both the remarriage rates have increased rapidly; those of widows have more than doubled. There are no great differences in trend at older ages.

### The relation between marriage rates and population structure

A set of marriage rates can be summarised in a nuptiality table, in the same way as death rates are summarised in a life table. It is a convenient way of bringing out their implications, and also useful because the results can be combined with fertility rates or mean family sizes in the calculation of replacement rates.

Net nuptiality tables based on the marriage rates of 1951–55 for both males and females were published in Appendix C of the 1956 Commentary and described on page 51 of that volume. The marriage rates for 1957 were rather higher at the younger ages than those of 1951–55 and an abridged nuptiality table based on these rates was calculated to see the effect of this difference.\*

It was demonstrated in the 1956 Commentary that nuptiality tables based respectively on the male and female marriage rates of 1951–55 were not consistent with each other. Indefinite continuance of these rates would imply 4 per cent more marriages of men under 50 than of women under 45 although these two are normally about equal in number and total 94 per cent of all marriages. The 1957 abridged nuptiality table shows a similar difference of 3·5 per cent. This feature derives from the sex and age structure of the unmarried population which contains the balance of the former surplus of women that is gradually becoming confined to the older ages where few marriages take place. As the population structure becomes more normal, therefore, either male marriage rates will tend to fall or female ones to rise, possibly both. Tables XXI and XXII in fact show that the first marriage rates of young women continue to rise, but the same is true for young men. There are some signs of a fall in the marriage rates of older bachelors and male remarriage rates are clearly declining, but these have a much smaller weight in the total number of marriages.

Table XXIV shows what would happen to the proportions ever-married between ages 15 and 50 if the 1951–55 and 1957 marriage rates persisted. On the basis of the 1957 rates, only 6 per cent of the men and 4 per cent of the women in the 45–49 age-group would remain unmarried. The proportions married for 1957 are higher than those for 1951–55 in all the age-groups shown, but the difference is, as is to be expected, greater at the younger ages. Table XXV shows the proportions married and ever-married in the age-group 45–49 at each census since 1851 and based on the nuptiality of 1951–55 and 1957. These last at 94 per cent for men and 96 per cent for women are higher than any ever recorded in England and Wales, exceeding those at the 1951 Census by 4 percentage points for men and 11 points for women (1 point more in each case than on the basis of the 1951–55 nuptiality).

**Table XXIV. Proportions ever-married, according to the net nuptiality of 1951–55 and 1957, England and Wales**

(Per thousand)

Men		Age-group	Women	
Nuptiality of			Nuptiality of	
1951-55	1957		1951-55	1957
6	9	15-19	49	61
251	291	20-24	528	588
685	736	25-29	838	883
844	868	30-34	909	933
897	912	35-39	931	950
920	931	40-44	940	956
930	939	45-49	945	960

\* Some details of the methods used were given in the *Census 1951, England and Wales, Fertility Report*, page cx.



**Table XXV. Proportions married and ever-married among men and women aged 45-49, England and Wales**

Censuses 1851-1951 and net nuptiality of 1951-55 and 1957

(Per thousand)

	Men		Women	
	Ever-married	Married	Ever-married	Married
Census of				
1851 .. ..	879	810	874	739
1861 .. ..	892	831	878	744
1871 .. ..	901	842	876	740
1881* .. ..	901	842	877	734
1891* .. ..	896	836	871	728
1901* .. ..	886	827	858	726
1911 .. ..	873	824	835	729
1921 .. ..	876	837	832	739
1931 .. ..	890	855	832	733
1951 .. ..	902	878	848	780
Net nuptiality of 1951-1955 ..	930	900	945	867
„ „ „ 1957† .. ..	939	(909)	960	(880)

\* Estimated from data for age-group 45-54.

† The proportions married based on the 1957 nuptiality have been estimated from the proportions ever-married and are not independent figures like those for the earlier years.

More people are getting married, and they are getting married at younger ages. The two things are closely linked, for even without a further increase in the rates at young ages the marriage rates of 1951-55 are sufficient to deplete the unmarried population over age 25 further. Hence the changing age proportions of the marriageable population are bound to lead to a further lowering of the average age at marriage. This was demonstrated in the 1956 Commentary, Table XXXIII which indicated how the age proportions of spinsters between the ages of 15 and 35 would be affected by a continuance of the 1951-55 marriage rates.

The relative numbers of men and women in the main marrying age-groups are shown by the following statement.

**Males aged  $17\frac{1}{2}$ -45 per 1,000 females aged 15-42 $\frac{1}{2}$  (see text)**

	Census						Estimate 1957	Nuptiality table 1951-55	Abridged nuptiality table 1957
	1871	1901	1911	1921	1931	1951			
All conditions	877	876	892	846	892	988	1,012	1,039	1,041
Unmarried	786	787	808	724	800	968	1,059	1,087	1,121

On average men are between two and three years older at marriage than women. The difference between the mean marriage ages of all bridegrooms and all brides, shown in Table L of Part II, has gradually increased from just over two years in the nineteenth century and at the beginning of the twentieth to about three in the nineteen forties and since. The average of the male populations at ages 15-44 and 20-44 last birthday (roughly equivalent to  $17\frac{1}{2}$ -45 in exact years) has therefore been related to the average of the female populations at ages 15-44 and 15-39 (say 15-42 $\frac{1}{2}$ ).

The last two columns of the statement are based on the average number of survivors in the net nuptiality tables for 1951-55 and for 1957. It should be remembered that the ratio for the unmarried in this column is affected by the inconsistency between the male and female marriage rates, mentioned above; if the female rates came into line with the male there would be fewer unmarried women left and the ratio would be slightly larger.

Apart from 1921, the ratios up to 1931 show a deficit of unmarried men of about 20 per cent and for all conditions combined of 11 or 12 per cent. Up to 1911 this was due largely to the effect of net emigration which was predominantly male. The lower rates for 1921 and those for 1931 also reflect the losses of the First World War. Since the early nineteen twenties net emigration has ceased to be of importance and the number of war deaths was much smaller in 1939-45 than in 1914-18. There has also been a slight increase in the proportion of boys among live births. These changes have been establishing balance between the sexes; and the ratios in the actual population, both of all conditions and unmarried alone, have been approaching those in the life and nuptiality tables. This must have been a powerful factor in raising the marriage rates of women, though not the only one, as the male rates have also risen.

**Total married women of reproductive age.**—The effect of these high rates in raising the proportion of the population which is married has been shown above in Table XXV. It is important for the fertility of the community, since that depends largely on the number of married women of reproductive age in the population. The proportions of married women are shown by five-year age-groups under age 50 for selected years in Table XXVI.

**Table XXVI. Married women per 1,000 total female population in each age-group and ratio of proportion to that of 1938 taken as 100: 1911, 1931, 1938, 1946, 1951, 1956 and 1957, England and Wales**

Year	Age-group							Aggregates	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	20-39	15-49
Married women per 1,000 total female population									
1911	12	242	558	711	752	755	729	552	502
1931	18	257	587	733	755	749	733	572	529
1938	23	328	643	733	771	768	736	623	566
1946	35	436	696	800	797	784	762	686	626
1951	42	475	769	828	832	812	780	731	666
1956	55	540	806	866	857	845	804	774	697
1957	60	552	814	872	862	851	810	782	703
Ratio of proportion to that of 1938 taken as 100 (Calculated before rounding off the proportions)									
1911	52	74	87	97	97	98	99	89	89
1931	78	78	91	100	98	98	100	92	93
1938	100	100	100	100	100	100	100	100	100
1946	153	133	108	109	103	102	103	110	111
1951	184	145	120	113	108	106	106	117	118
1956	241	165	125	118	111	110	109	124	123
1957	260	168	127	119	112	111	110	125	124

Throughout the period covered by the table the proportions married in the total female population have increased in each age-group and these increases have been outstanding at ages under 25. The proportion in 1957 exceeded that of 1938 by no less than 160 per cent at ages 15-19 and by 68 per cent at ages 20-24. The rise of 27 per cent at ages 25-29 is less striking but hardly less significant, applying as it does to larger proportions married.

In any particular year the proportions married increase with advancing age, at first very rapidly and then more slowly, to a maximum close to age 35. They then decline slowly as new marriages are increasingly offset by widowhoods, but the total reduction in the proportion to age 49 is relatively small.

The last two columns of Table XXVI show the proportion of married women in the reproductive age-group 15-49 as a whole and in the more critical group 20-39, among whom 90 per cent of births occur. The proportions represent the fractions of the reproductive years which fall within married life. From 1911 to 1931 the former proportion rose slightly from 50·2 to 52·9 per cent, and then more rapidly to 56·6 in 1938. It had reached 62·6 by 1946 and 70·3 by 1957. In the age-group 20-39 the proportion rose from 55·2 per cent in 1911 to 78·2 in 1957.

These increases have been exaggerated by the ageing of the population in the 15-49 group since 1911 which has tended to increase the relative number of women at the older ages within the group, i.e. where the proportion married is greater. To remove this distortion a marriage index for the year can be calculated, by expressing the actual number of married women in the group as a ratio to the number which would have been married if the populations in the component five-year age-groups had been subject to standard proportions married in those age-groups, viz. those for 1911. The difference of this ratio from unity thus indicates changes in the proportions married apart from those due to ageing.

Marriage indices standardised on 1911 proportions married within successive five-year age-groups from 15 to 49, with the corresponding unstandardised figures, are shown below :

Year	1911	1931	1938	1946	1951	1957
Standardised .. ..	1·000	1·022	1·067	1·146	1·200	1·269
Unstandardised .. ..	1·000	1·054	1·127	1·247	1·327	1·400

The correction for ageing shows that the true increase in the proportion married among the women aged 15-49 between 1911 and 1957 was 27 per cent instead of the 40 per cent suggested by the crude proportions, one third of the latter increase being due to the ageing of the population and unrelated to the incidence of marriage.

The fact that such a high degree of marriage has been attained is important, and the proportions are still growing. In fact, it would not be necessary for rates of new marriages to be as high as those recently experienced to achieve further increases in the proportion of married women in the population aged 15-49. The marriage rates experienced before the war would not, however, suffice for this purpose. This may help to put recent changes in age marriage rates in proper perspective.

#### Seasonal incidence of marriage

The numbers of marriages and rates per 1,000 population by calendar quarter are shown in serial form in Table D. Monthly numbers of marriages since 1947 are given in Table N, together with ratios of the daily average for each month to that for the calendar year.



Relatively many marriages occur in Eastertide, in the summer months and around Christmas, and fewest in January, May and November. In years when Easter falls in March the number of marriages in March is increased at the expense of the number in April by 15 to 20 thousand.

Since 1949 a new tendency has appeared : March has become the peak month for marriage even when Easter falls in April. Its daily average is twice to two and a half times as large as that for the whole year. No doubt the reason is that the income tax year ends on 5th April, and that some people who would otherwise have married after that date bring their marriage forward into the earlier tax year in order to take advantage of the additional tax relief. A similar phenomenon has been noticed in some other countries, the month depending on the local tax law.

### Marriage incidence in different parts of the country

The numbers of marriages in regions, counties and county and metropolitan boroughs are given in Table F, and the numbers of persons marrying in each region by age and previous marital condition in Table M.

These figures have to be used with caution, because the district in which the marriage takes place often contains the residence of only one of the parties and sometimes of neither. This distorts local differences in rates, though less so in comparisons between areas as large as regions. Rates for the latter and ratios to the national rate are given in Table XXVII.

**Table XXVII. Marriage rates in regions of England and Wales and in London A.C., 1957**

*The ratios were calculated before rounding off the rates*

Area	Persons marrying per 1,000 popula- tion	Ratio of rate to that of England and Wales		
		Crude	Standardised on population of	
			Men	Women
<b>ENGLAND AND WALES</b> .. .. .	<b>15·4</b>	<b>1·00</b>	<b>1·00</b>	<b>1·00</b>
Northern Region .. .. .	16·0	1·04	0·99	1·02
East and West Ridings Region .. ..	15·6	1·01	1·15	1·10
North Western Region .. .. .	15·4	1·00	1·09	0·97
North Midland Region .. .. .	15·2	0·98	1·04	1·12
Midland Region .. .. .	15·6	1·01	1·03	1·04
Eastern Region .. .. .	13·0	0·84	0·87	0·90
London and South Eastern Region ..	16·9	1·09	1·14	0·98
London A.C. .. .. .	20·6	1·33	1·17	1·03
Remainder .. .. .	15·3	0·99	1·14	0·95
Southern Region .. .. .	14·3	0·92	0·90	0·97
South Western Region .. .. .	14·1	0·91	0·94	0·95
Wales (including Monmouthshire) ..	15·1	0·98	0·94	0·98
Wales I (South East) .. .. .	15·7	1·01	1·00	1·02
Wales II (remainder) .. .. .	13·7	0·89	0·82	0·88

The crude rates are affected by differences in the composition of the population by sex, age and marital condition. Table XXVII therefore contains ratios of the regional to the national rate which have been standardised by an Area

Comparability Factor calculated in a similar way to that used with birth rates. The results differ a little according to whether male or female marriage rates are used; the rates for the two sexes are not quite consistent, as was noted earlier in connection with the nuptiality tables. This is particularly noticeable in the London and South Eastern Region with its larger numbers of unmarried women. (The ratio of unmarried males aged  $17\frac{1}{2}$ –45 per 1,000 females aged 15–42½ in this region at the 1951 Census was 860 compared with the national ratio of 968 shown on page 37.)

The standardised ratios are high in the East and West Ridings Region, the County of London and the North Midlands Region. The special attraction of a London wedding has been noticed for many years, and is more obvious in the figures for the City and one or two boroughs such as Westminster, but the greater part of the surplus in the crude rate for the county as a whole is accounted for by the structure of the population. Low ratios are found in Wales II and the Eastern, Southern and South Western Regions.

### Manner of solemnization of marriage

The marriages of 1957 are analysed according to the manner of solemnization in Appendix B of Part II, of which Table 7 gives comparative figures at five-year intervals from 1844 onwards. Similar figures last appeared in 1952.

Among the 346,903 marriages registered in 1957, 97,084 (280 per thousand) were civil marriages, and 249,819 were solemnized with religious ceremonies. Both the number and the proportion of civil marriages have decreased a little since 1952, in contrast to earlier years which saw a steady rise in the proportion of civil marriages from 26 per thousand in 1844 to 306 per thousand in 1952. A minor peak in the proportion of civil marriages occurred on the outbreak of war in 1914.

Some figures from Table 7 have been reproduced below in Table XXVIII.

Over the years there has been a decline in the proportion of marriages taking place in the Church of England and the Church in Wales from 932 per thousand marriages with religious ceremonies in 1844 to 782 in 1904 and 689 in 1957. Table XXIX suggests that this fall is in part a reflection of the parallel increase which has taken place in the proportion of civil marriages to all marriages.

But no doubt the changes in the proportions in Table XXVIII are also influenced by changes in the relative strengths of the various denominations. In the second half of the nineteenth century the proportion of Free Church marriages rose continuously, from 49 per 1,000 marriages with religious ceremonies in 1844 to 110 in 1869 and 160 in 1904. Since the First World War it has tended to fall a little. The Roman Catholic proportion, on the other hand, previously stable at about 5 per cent, has been rising, rather more quickly in the last five-year interval:

Calendar period	Average annual percentage increase in the proportions of Table XXVIII			
	<i>(based on unrounded figures)</i>			
1904–24	..	..	..	1.9
1924–29	..	..	..	2.2
1929–34	..	..	..	2.5
1934–52	..	..	..	2.3
1952–57	..	..	..	3.3

**Table XXVIII. Marriages by manner of solemnization, 1844-1957, England and Wales**

Year	Civil marriages per 1,000 total marriages	Marriages according to rites of denominations shown per 1,000 marriages with religious ceremonies						
		Church of England and Church in Wales	Roman Catholic	Other denominations				Jews
				All	Methodists	Congrega- tionalists	Baptists	
1844	26	932	18	49				1
1864	81	851	52	95				2
1884	131	813	50	134				3
1904	179	782	49	160				9
1919	231	776	67	150	73	31	25	7
1924	238	759	72	160	79	33	26	9
1929	257	756	80	155	76	31	25	9
1934	284	747	91	153	73	30	25	9
1952	306	714	136	142	69	29	22	8
1957	280	689	160	145	69	27	24	7



Table XXIX. Changes in the proportions of different types of marriages per 1,000 total marriages, 1844 to 1957, England and Wales  
*Figures are rounded and may not add to totals*

Year	Civil	Church of England and Church in Wales	Roman Catholics	Other denomina- tions	Jews	Change in proportion				
						Civil	Church of England and Church in Wales	Roman Catholics	Other denomina- tions	Jews
1844	26	907	17	48	1	+153	-265	+24	+83	+6
1869	95	763	41	99	2					
1904	179	642	41	131	7	+105	-107	+24	-21	0
1934	284	535	65	110	7					
1952	306	496	95	98	5	-4	-39	+50	-6	-2
1957	280	496	115	104	5					

Tables 1 and 2 of the Appendix in Part II show the regional incidence of manner of solemnization in 1957. The proportion of civil to all marriages varied from 230 per 1,000 in the North Western Region and 238 in Wales II to 334 in the London and South Eastern Region, and from 171 in Radnorshire to 403 in the County of London. The decline in the proportion of civil marriages between 1952 and 1957 was found in all regions except Wales I where the proportion rose slightly.

The proportion of marriages in the Church of England or Church in Wales to all religious marriages, averaging 69 per cent for the whole country, varied from over three quarters in the Southern, Eastern and North Midland Regions to about one half in Wales; among the counties it was highest in Herefordshire (87 per cent), Rutland and Norfolk and lowest in Merionethshire (32 per cent). The Roman Catholic proportion, averaging 16 per cent, was highest in the North Western Region (over a quarter), the London and South Eastern and the Northern Regions, and lowest in Wales II and the South Western and North Midland Regions (all under 10 per cent); it was about 30 per cent in the counties of London and Lancashire and about 20 per cent in Warwickshire, the North Riding, Durham and Northumberland, but less than 1 per cent in Radnorshire. The Methodist proportion (7 per cent on average) was highest in the north, including the whole of Yorkshire, and in the south west, especially in Cornwall (where it was 31 per cent). The Congregationalist, Baptist, Presbyterian and Calvinistic Methodist proportions were highest in Wales (the last-named Church is almost entirely concentrated there, and accounted for 31 per cent of all religious marriages in Merionethshire); the Jewish proportion was highest in the London area.

Table 3 of the Appendix gives both civil and religious marriages by type of preliminaries and Table 4 the proportions of marriages by licence instead of banns or certificate. This proportion was nearly half for civil marriages and about 9 per cent for religious ones (7 per cent for the Church of England and Church in Wales and 13 per cent for all others combined). There was some regional variation, licences being most customary in Wales II.

Tables 5 and 6 analyse the marriages in registered buildings according to whether they were solemnized before a Registrar or an Authorised Person\*. The proportion of such marriages before an Authorised Person averaged 41 per cent, but varied considerably between different denominations and between different parts of the country, being generally low in Wales II. It was 88 per cent among the Methodists, with little regional variation, but only 15 per cent among Roman Catholics, a figure which conceals large variations between the Midland (80 per cent), North Midland (43) and East and West Ridings (28) Regions and practically zero in Wales, the South Western and Eastern Regions. The other denominations shown in Tables 5 and 6 occupy an intermediate position between these two extremes, both in their average proportions and in the extent of regional variation.

### **Places of worship and buildings in which marriages may lawfully be solemnized**

Table 8 in Appendix B of Part II gives the number of buildings certified as places of worship by denomination and region, and Table 9 the number of buildings in which marriages may lawfully be solemnized, both as at 30th June 1957.

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\* A person authorised by the governing body of the registered building to register marriages, and certified as such to the Registrar General, under the provisions of the Marriage Act, 1898, re-enacted in the Marriage Act, 1949.

## WIDOWHOOD

Table SS of Part II shows the numbers of marriages ended by the death of one partner, classified by the ages of the deceased and surviving partners. The table is deficient in respect of those deceased persons for whom a statement of marital condition was not given when the death was registered. The percentages of men and women where the marital condition was not stated at registration are shown below:

**Percentage of deaths where marital condition was not stated**

Age at death	Men	Women
15- .. ..	8.2	0.3
20- .. ..	34.0	0.4
25- .. ..	25.8	0.1
30- .. ..	18.8	0.2
35- .. ..	14.3	0.1
40- .. ..	10.5	0.1
45- .. ..	7.1	0.1
50- .. ..	5.1	0.1
55- .. ..	4.0	0.0
60- .. ..	3.4	0.0
65- .. ..	2.9	0.0
70- .. ..	2.5	0.0
75 and over ..	2.5	0.0
All ages.. ..	3.7	0.1

The "not stated" percentage is low for female deaths at all ages, but is substantial for male deaths particularly at younger ages. Although the marital condition of deceased females could always be inferred from the Rank or Profession (now Occupation) column of the death registers, the marital condition of deceased males can only be obtained under the Population (Statistics) Act, 1938. Particulars are not obtained for the purposes of this Act on the registration of a death on a coroner's certificate after an inquest. Male deaths by accident, poisoning or violence, which normally involve an inquest, amounted in 1957 to 56 per cent of deaths of males aged 20-24, 43 per cent of those aged 25-29, 29 per cent of those aged 30-34, and 22 per cent of those aged 35-39. These proportions account for the general scale of the male percentage of "not stated" marital condition. In addition to this major factor, failure to state marital condition is more likely for bachelors than for married men whose widows are commonly the informants. A rateable distribution of the "not stated" may lead to some bias in that such persons are likely to be single and to be concentrated in the younger ages, but the amount of such a bias will be small particularly in relation to the "not stated" elements consequent on registration on a coroner's certificate. It is possible that the rates per thousand married women in Table XXX are slightly over estimated.



**Table XXX. Widowhood rates, 1939, 1946-50 and 1953 to 1957,  
England and Wales\***

1939	1946-50	1953	1954	1955	1956	1957	Age of sur- viving spouse	1939	1946-50	1953	1954	1955	1956	1957
Deaths of wives per 1,000 married men							15 and over	Deaths of husbands per 1,000 married women						
8·7	7·5	7·0	6·9	6·9	6·8	6·8		14·3	13·5	13·7	13·7	13·9	14·0	14·0
2·1	1·4	0·6	0·5	0·5	0·5	0·4	15-	1·8	1·1	0·8	0·8	0·8	0·8	0·9
2·3	1·4	0·8	0·7	0·6	0·6	0·6	25-	2·0	1·6	1·2	1·1	1·1	1·1	1·1
2·3	1·6	1·0	1·0	0·9	0·8	0·8	30-	2·8	2·2	1·7	1·7	1·6	1·6	1·5
2·8	1·9	1·3	1·3	1·2	1·2	1·3	35-	4·4	3·3	2·8	2·8	2·7	2·7	2·6
3·6	2·4	2·0	2·0	1·8	1·8	1·9	40-	6·6	5·2	4·6	4·5	4·5	4·5	4·6
4·9	3·9	3·0	3·0	3·0	2·9	2·9	45-	10·3	9·0	7·8	7·8	7·9	7·7	7·9
7·4	5·7	5·0	5·0	4·8	4·5	4·6	50-	16·0	14·2	14·2	13·9	13·6	13·1	13·2
10·5	8·6	7·7	7·3	7·4	7·4	7·5	55-	22·9	21·2	21·4	21·2	21·6	22·0	21·9
16·5	13·7	12·1	11·8	12·0	11·8	11·5	60-	35·0	33·0	33·0	32·5	33·0	33·3	33·0
24·8	21·0	19·8	19·1	19·1	19·0	18·3	65-	49·6	47·1	49·2	48·3	49·3	49·8	49·9
37·3	32·9	30·9	30·5	30·7	30·4	29·4	70-	72·1	69·8	70·2	69·9	70·9	72·3	69·8
73·3	58·5	58·6	56·8	57·8	59·2	56·0	75 and over	126·4	95·3	108·2	107·6	113·3	111·9	105·9

\* Non-civilian casualties were not classified by marital condition before 1950. An approximate allowance has been made for them by rateable allocation.

Table XXX shows widowhood rates by age for selected periods between 1939 and 1957. These rates differ from ordinary death rates in being based on a selected population which excludes those persons whose health does not permit them to marry. Also, the deaths which generate these rates occur not at the specified ages but at ages distributed around a mean that is a little older than that of the married women whose husbands die (and conversely a little younger than that of the married men whose wives die). This difference is caused by the age differential at marriage. Nevertheless, the rates given in Table XXX reflect the main variations in mortality rates by sex and age and also the scale of annual changes. After allowance has been made for the above age differences, the death rates of husbands per thousand married women are rather higher than the death rates of wives per thousand married men.

The general level of the widowhood rates are of much more importance than small differentials within their main structure. The chance that a married woman aged 25 will become a widow before she is 45 is a little less than 1 in 20, which compares with a chance of 1 in 40 of dying herself before she reaches the age of 45. From Table XXX it is clear that the current level of mortality at ages under 45 is so low that the ending of marriages by the death of one of the partners is not seriously depleting the younger married population or in particular the population of married women in the reproductive age-groups.

## DIVORCES

In 1957, 27,858 petitions for dissolution or annulment of marriage were filed in England and Wales. 23,785 decrees were made absolute during the year, or 2 per 1,000 married couples.

Table XXXI summarising the statistics in Table O of Part II for the last three decades, relates the number of petitions filed and of decrees absolute granted to the number of married women aged 20-49. The bulk of divorces occurs in this age range, and its use for the denominator in place of the total number of married couples gives the rates a rough measure of age standardisation.

**Table XXXI. Divorce petitions filed and decrees absolute granted,  
1931 to 1957, England and Wales**

Year	Petitions filed		Decrees absolute granted	
	Number	Per 1,000 married women aged 20-49	Number	Per 1,000 married women aged 20-49
1931-35† ..	4,784	0·80	4,011	0·67
1936-40† ..	7,535	1·17	6,181	0·96
1941-45† ..	16,075	2·30	10,389	1·49
1946 ..	43,163	6·09	29,829	4·21
1947 ..	48,501	6·81	60,254	8·47
1948 ..	37,919	5·28	43,698	6·08
1949 ..	35,191	4·87	34,856	4·82
1950 ..	29,729	4·09	30,870	4·24
1951 ..	38,382	5·23	28,767	3·92
1952 ..	34,567	4·69	33,922	4·60
1953 ..	30,542	4·14	30,326	4·11
1954 ..	29,036	3·93	28,027	3·79
1955 ..	28,314	3·83	26,816	3·62
1956 ..	28,426	3·83	26,265	3·54
1957 ..	27,858	3·74	23,785	3·19

† Annual average.

There has been an upward trend in the incidence of divorce in this country ever since the basis of the present divorce law was established a hundred years ago. Each of the two world wars added greatly to the otherwise slow increase. In the Commentary for 1956 (page 62) it was estimated that the war of 1939-45 may have doubled the divorce rate compared with what it would otherwise have been at the present time.

In addition to the considerable fluctuations caused by the upheaval of war the sequence of the figures is also disturbed by changes in the law such as the Matrimonial Causes Act, 1937, and enactments relating to financial assistance to litigants in need of it such as the Legal Aid and Advice Act, 1949\*, as well as the changes in the time lag between petition and decree absolute. Apart from the accumulation of business for the courts this is influenced by the period between granting a decree *nisi* and making it absolute. Up to 30th April 1957, a decree *nisi* could not normally be made absolute for at least six weeks.

\* This act came into operation on 2nd October 1950.

This period was extended to three months by the Matrimonial Causes (Decree Absolute) General Order, 1957, which came into operation on 30th April 1957, and applied to proceedings instituted on or after that date. That is why decrees absolute in 1957 dropped so much more compared with 1956 than did petitions filed.

Nevertheless, the petition rates since 1954, by which time the disturbance caused by the 1949 Act must have worked itself out, do not show the usual rising trend and even suggest that a slight decline may have set in.

Rowntree and Carrier\* recently studied the proportion of marriages ending in divorce according to year of marriage. They concluded that about 3 per cent of the couples married in the early nineteen twenties had been divorced by the time thirty years had elapsed, the majority of them after 1939. The marriage cohorts of the late thirties and early war years had fared much worse, 6 per cent having been divorced by 1955, so that the ultimate proportion for them was likely to be above that figure, perhaps as high as 10 per cent. The more recent cohorts have, however, had somewhat lower divorce rates so far than their immediate predecessors had at comparable marriage durations.

### New Tables

The analysis of dissolutions and annulments made absolute was put on a new basis in 1957 and more detailed tables were introduced. They replace the former Tables P1 to P4, and classify the decrees absolute by the following characteristics:

- P1 Party to whom and grounds on which decree granted
- P2 Present age of husband and wife (numbers and rates)
- P3 Marriage ages of husband and wife in combination
- P4 Wife's marriage age and duration (numbers and rates)
- P5 Wife's marriage age and surviving children of present marriage
- P6 Wife's marriage age and the marital condition of both parties before the marriage in combination.

In addition Part II for 1957 contains two supplements to these tables which it is intended to publish only at intervals of several years as more data accumulate, because of their complexity and consequent small cell size:

Supplement to P3 Year of marriage and marriage ages of husband and wife in combination

Supplement to P6 Year of marriage and (a) husband's, (b) wife's age at and marital condition before the marriage.

Some improvements have been made in the data. In particular the marriage ages are now those stated on the original marriage certificate, and the present ages (i.e. those at the date of the decree absolute) are estimated from the marriage ages, treated as six months after the last birthday, by adding the marriage duration correctly rounded to the nearest integral year. The durations are calculated as for maternities, i.e. as the difference between the calendar month of marriage and the notional month containing the date of the decree absolute. The notional month of, e.g. June, runs from 16th June to 15th July inclusive.

The number of cases where the marriage age was not stated (a little over 1 per cent) was found to be rather larger than would have been expected from the marriage statistics. The excess seems to consist of cases where the marriage was contracted abroad and no document showing the age at marriage could be produced to the divorce court. They have been omitted from Tables XXXII and XXXIII.

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\* Griselda Rowntree and Norman H. Carrier, *The Resort to Divorce in England and Wales, 1858-1957*, "Population Studies", Vol. XI, No. 3 (March 1958), pp. 188-233.



## Rates

Estimates of the population exposed to risk are available only by present age of husband or wife (Table P2) and by wife's marriage age and duration at present ages under 50 (Table P4). Hence true divorce rates per 1,000 existing married couples can be given only for these. To get an idea of the relative incidence of divorce according to the other characteristics, and of the order of magnitude of the true rates, some rates may be calculated on the basis of the original number of marriages, whether or not they are still in existence in the year under review. This has been done approximately in Tables XXXII and XXXIII. (The divorces of couples married before 1935 have been related to the marriages of 1925-34.)

Rates based on the true population, i.e. the number of women (or men) still married, are larger than rates based on the original number of marriages, the more so the longer the marriage duration. They will exceed the latter rates by the proportion by which the original marriages exceed those still in existence. For previously single wives married at ages under 35 since 1935 the excess is shown in the following statement. (It will be larger for marriages before 1935, for older marriage ages and for previously divorced wives.)

### Percentage excess of original marriages of spinsters over population in 1957 of women married once only

Calendar year of marriage	Age at marriage			
	Under 20	20-24	25-29	30-34
1949-53	1.2	2.2	2.8	3.4
1945-48	11.3	7.7	6.9	8.3
1940-44	22.7	19.6	14.7	16.8
1935-39	23.8	20.1	17.5	not available

The ratios clearly show the difference made by marriage duration (and by the war), but also that made by age—as marriage age rises, most of the ratios at first decline as a result of falling divorce incidence, but increase again after age 30 as a result of rising mortality and widowhood.

### Parties to whom and grounds on which decrees granted

Decrees are classified by the parties to whom they are granted and by all the grounds on which they were granted. This is an advance on previous statistics which were classified by the first ground mentioned in the original petition for divorce. The figures are given in Table P1.

Of the 23,785 decrees made absolute in 1957, 2 per cent were annulments and the remainder dissolutions. They were distributed as follows by party to whom granted:

Type of decree	Number	Party to whom granted ( <i>per cent</i> )			
		Total	Husband	Wife	Both
Total .. ..	23,785	100	45	54	0.4
Annulments ..	462	100	56	42	2
Dissolutions ..	23,332	100	45	54	0.3

Adultery, desertion or cruelty were the grounds in 99 per cent of all dissolutions. Those granted to one party on one ground were distributed thus:

*Per cent*

Ground	Granted to husband on ground of wife's—	Granted to wife on ground of husband's—
All grounds . . . . .	100	100
Adultery . . . . .	56	38
Desertion . . . . .	41	37
Cruelty . . . . .	2	24
Lunacy . . . . .	1.2	0.6
Other (mostly presumed death) . . . . .	0.3	0.3

**Ages and prior marital condition of parties, duration of marriage**

**Present age**

Dissolutions and annulments by age of husband and of wife at the date of the decree absolute are given in Table P2 together with rates per 1,000 married men or women.

The total rate in 1957 was 2 per 1,000 married couples. For husbands it rose from about 1 per 1,000 in the age-group 20–24 to between 3 and 4 per 1,000 in the age-range 25–39, than fell off again to about 1 per 1,000 at ages 50–59 and a fractional value over age 60. For wives the proportion was 2 per 1,000 in the age-group 20–24 and 4 per 1,000 at 25–29, declining slowly to 2 per 1,000 at 40–49, 1 per 1,000 at 50–59 and a small fraction thereafter.

**Marriage ages of husband and wife in combination, by year of marriage**

Table P3 shows the marriage ages of husbands and wives in combination, and the Supplement divides the decrees further by calendar year of marriage. Approximate rates are shown in Table XXXII; they are based on the original number of marriages and are subject to the qualifications mentioned on page 49.

**Table XXXII. Divorce rates per 1,000 related marriages, by marriage ages of husband and wife in combination and calendar year of marriage, 1957, England and Wales**

Age of wife at marriage	Age of husband at marriage					
	All ages	Under 20	20–	25–	30–	35 and over
Persons married in the years 1949–53						
All ages	4.0	11.1	5.0	3.3	2.9	2.5
Under 20	8.2	12.0	8.0	6.8	5.9	8.8
20–	3.8	9.0	4.0	3.0	3.6	5.0
25–	3.0	12.4	3.8	2.7	2.5	3.8
30–	2.6	—	3.3	3.0	2.3	2.5
35 and over	2.0	—	3.7	4.3	2.8	1.8

Table XXXII—continued

Age of wife at marriage	Age of husband at marriage					
	All ages	Under 20	20–	25–	30–	35 and over
Persons married in the years 1945–48						
All ages	3.3	7.3	4.2	3.2	2.7	1.7
Under 20	6.6	7.4	6.4	6.6	6.1	7.8
20–	3.4	6.9	3.5	3.1	3.3	4.3
25–	2.5	10.9	3.3	2.3	2.2	2.4
30–	2.4	29.9	4.8	2.5	2.3	2.1
35 and over	1.3	—	5.9	5.6	2.1	1.0
Persons married in the years 1940–44						
All ages	2.2	4.4	2.7	1.9	2.0	1.1
Under 20	3.9	4.9	3.7	3.5	5.8	4.4
20–	2.3	3.5	2.5	1.9	2.5	3.7
25–	1.6	4.9	2.2	1.4	1.5	1.7
30–	1.5	—	2.9	1.7	1.6	1.2
35 and over	0.7	27.8	3.8	3.0	1.4	0.5
Persons married in the years 1935–39						
All ages	1.6	4.4	2.3	1.4	1.1	0.5
Under 20	3.5	4.8	3.4	3.2	3.1	2.5
20–	1.9	3.6	2.1	1.6	1.7	1.8
25–	1.0	4.3	1.5	1.0	0.9	0.9
30–	0.9	—	1.8	1.1	0.9	0.6
35 and over	0.3	—	2.3	1.3	0.5	0.2
Persons married before 1935						
All ages	1.2	3.2	2.0	1.0	0.6	0.2
Under 20	3.2	3.5	3.3	2.7	2.0	1.7
20–	1.6	2.8	1.9	1.2	1.1	0.7
25–	0.7	3.5	1.2	0.7	0.4	0.2
30–	0.3	—	1.4	0.5	0.3	0.1
35 and over	0.1	—	0.4	0.4	0.2	0.1

The younger the marriage age, the higher were the divorce rates. This was true for husbands and wives separately and also, generally speaking, for the age of one of them within a given age-group of the other. The few apparent exceptions may be due to chance fluctuations caused by small numbers or to the second noticeable feature: within the pattern of high rates going with young marriage ages, high divorce rates are associated with the widest differences in marriage age.



## Marriage age of wife by duration of marriage

Table P4 shows the decrees absolute by marriage age of wife and duration of marriage, with (true) rates in those cells where the wife was under age 50 at the date of decree.

Comparison of these rates with those in Table P2 shows clearly that marriage age exerts a much greater influence than current age. There is a very regular progression in the rates of Table P4: they fall with advancing marriage age—those for women married before their twentieth birthday are about twice as high throughout as those for the marriage age-group 20–24; and they fall with lengthening marriage duration (allowing for the fact that petitions may not normally be filed within three years of the marriage).

Hence they are highest in the duration range 4–11 years, being about 8 or 9 per 1,000 for the under 20 marriage age-group, 4 per 1,000 for those 20–24 at marriage, and 3 per 1,000 for those over 30. Even at duration 20–24 years the rate for those aged under 20 at marriage is still 4 per 1,000, and for those aged 20–24, 2 per 1,000.

## Previous marital condition by marriage age and year

In Table P6 the decrees absolute are analysed by the marital condition of both parties before the marriage in combination, within age-groups of wife at marriage. The Supplement gives them by marriage age and year for each previous marital condition, separately for husbands and wives. From the latter the rates in Table XXXIII (based on the original marriages) have been derived.

**Table XXXIII. Divorce rates per 1,000 related marriages, by husband's or wife's age at and marital condition before the marriage and calendar year of marriage, 1957, England and Wales**

Calendar year of marriage	Previous marital condition	Age at marriage					
		All ages	Under 20	20—	25—	30—	35 and over
Husbands							
1949-53 ..	Single	4.1	11.1	5.0	3.2	2.4	2.2
	Widowed	1.9	—	4.4	2.8	3.9	1.8
	Divorced	5.0	142.9	9.9	7.7	5.9	4.0
1945-48 ..	Single	3.5	7.3	4.2	3.0	2.4	1.7
	Widowed	1.3	—	10.0	4.4	3.0	0.9
	Divorced	4.1	—	6.2	7.8	4.5	3.0
1940-44 ..	Single	2.3	4.4	2.7	1.9	1.9	1.3
	Widowed	0.8	—	9.4	2.1	2.5	0.6
	Divorced	2.9	—	16.9	4.5	5.2	2.1
1935-39 ..	Single	1.7	4.4	2.3	1.4	1.0	0.6
	Widowed	0.5	—	1.4	1.5	1.7	0.3
	Divorced	2.1	—	—	3.8	3.9	1.4
Before 1935 ..	Single	1.3	3.2	2.0	1.0	0.6	0.2
	Widowed	0.2	—	3.5	1.2	0.4	0.1
	Divorced	0.7	—	—	2.5	1.0	0.4

Table XXXIII—continued

Calendar year of marriage	Previous marital condition	Age at marriage					
		All ages	Under 20	20–	25–	30–	35 and over
Wives							
1949–53 ..	Single	4.1	8.2	3.7	2.7	2.0	1.4
	Widowed	2.2	27.0	7.7	4.1	2.2	1.9
	Divorced	4.7	—	8.8	6.0	4.6	3.4
1945–48 ..	Single	3.4	6.6	3.4	2.2	1.9	1.0
	Widowed	1.8	8.3	3.7	2.6	2.6	1.1
	Divorced	4.7	—	9.5	6.4	4.7	2.7
1940–44 ..	Single	2.3	3.9	2.3	1.5	1.3	0.6
	Widowed	1.2	—	4.1	3.4	3.0	0.6
	Divorced	3.8	—	13.4	6.9	3.9	2.3
1935–39 ..	Single	1.6	3.5	1.9	1.0	0.8	0.3
	Widowed	0.6	—	2.7	2.3	1.6	0.2
	Divorced	2.3	—	2.0	3.9	3.9	0.8
Before 1935 ..	Single	1.3	3.2	1.6	0.7	0.3	0.1
	Widowed	0.3	90.9	4.9	1.1	0.4	0.1
	Divorced	0.9	—	3.1	1.9	1.0	0.2

Generally speaking the rates are lowest for first marriages and highest for persons previously divorced, with the previously widowed in between, nearer to the single in the case of husbands. An exception are husbands aged 35 and over at marriage, among whom the rates of the previously widowed are clearly the lowest. For all marriage ages combined the rates of the previously widowed are much the lowest in both sexes (with those of the divorced still the highest), but this is only because of the different marriage age distributions of the three groups.

These rates being based on the original marriages the true differentials will be slightly larger in the same direction. For the greater divorce risk of the previously divorced, for example, means that relatively fewer of their original marriages will have survived to 1957 from a given marriage year, and therefore in this group the rates per 1,000 married women would exceed the rates per 1,000 original marriages by more than in the corresponding group of first marriages. Similarly, the differences between the rates of the various marriage cohorts reflect partly the influence of marriage duration (better illustrated in Table P4) and partly the differences between the two kinds of rates. To compare the experience of different marriage cohorts enough data will have to be accumulated to make the comparison at equal marriage durations.\*

### Children of the marriage

The 23,785 marriages dissolved or annulled in 1957 had altogether 30,765 children who were alive at the date of petition (irrespective of age, and including children legitimated by the marriage and adopted children but no other children of the parties†). 7,995 of these marriages (about a third) were childless and 7,309 (nearly another third) had one child, 1,567 (less than 7 per cent) had four or more children. The proportions in each marriage age-group are shown in Table XXXIV.

\* See Rowntree and Carrier, article quoted on page 48 above, Table 10.

† Where the petition was filed on or after 30th April 1957, children of the couple born before the marriage but not legitimated are also included.

**Table XXXIV. Percentage distribution of marriages dissolved or annulled by number of children, 1957, England and Wales**

Age of wife at marriage	Number of children					
	Total	0	1	2	3	4 and over
All ages	100	33	31	21	8	7
Under 20	100	21	32	25	12	10
20—	100	31	32	22	9	6
25—	100	43	30	19	5	3
30—	100	58	27	11	2	2
35 and over	100	81	13	4	2	0

Corresponding figures for the population of married couples in 1957 are not available. Some proportions from the 1951 Census are shown in Table XXXV, but they are not quite comparable because they relate to all live births to the women concerned, not to surviving children of the present marriage, and because the particulars are only available for women under age 50 at the census. The last column gives approximate proportions childless for those of them aged 45–49 at the census; if those for women of all ages were available they would probably lie between these and the ones in the main part of the table, nearer to the under 50 proportions at young marriage ages where the two sets differ most. In 1957 the proportion of childless or one-child families, and possibly of families with four or more children, may well have been slightly smaller than in 1951.

**Table XXXV. Percentage distribution of married women under age 50 at census by number of children born alive, 1951, England and Wales**

Age of wife at current marriage	Women under age 50 at census						Women 45–49 at census
	Number of children						
	Total	0	1	2	3	4 and over	0
All ages	100	21	31	26	12	10	20
Under 20	100	12	27	27	15	19	5
20—	100	19	31	28	12	10	11
25—	100	25	33	26	10	6	21
30—	100	35	32	20	8	5	35
35 and over	100	51	24	13	6	6	54

The proportions of women who are childless rise with marriage age among the divorced as they do in the general population. The comparison suggests, however, that divorce rates among childless couples may be something like twice as high as the average for the marriage age-group concerned, perhaps not quite so much in the oldest groups.

Approximate rates were calculated for 1950 in the 1946–50 Civil Text Volume (page 67). These were in terms of wife's age at date of decree absolute, not at marriage. They showed that divorce rates were highest for childless couples and declined with increasing family size.



## GENERAL MORTALITY

In 1957 there were 514,870 deaths registered in England and Wales, 266,407 being of males and 248,463 of females. This represents a decrease of 1,497 in the male and 4,964 in the female deaths compared with 1956.

Unless otherwise stated, the deaths recorded in the *Statistical Review* are those registered in the calendar year and not deaths which occurred in that year. The deaths recorded include deaths of non-civilians and foreign visitors. Deaths of non-civilians are not shown separately.

### Definitions

**Home population.**—This consists of the resident civilian population, together with members of British, Commonwealth and foreign armed forces stationed in the country at the time.

**Area of usual residence.**—In all areal tables deaths are classified according to the area of usual residence of the deceased. The inmates of certain categories of institutions, as, for example, alms-houses, homes for old people and boarding schools, are regarded as normally resident in those institutions. The definition of usual residence was modified in 1953, the chief alteration being that people dying in hospitals for the chronic sick and in mental and mental deficiency hospitals were regarded as being resident in the hospital. The effect of this change was to increase substantially the death rate in some of the smaller areas with large institutional populations. In 1956 and 1957 a slight modification was made by not including certain chronic sick hospitals, owing to the short average duration of stay of patients in them.

**Crude death rates** represent the total number of deaths from all causes or from a specified cause during the year, per thousand or per million of the estimated mid-year home population.

**Sex-age specific death rates** are calculated for all or specified causes by dividing the number of deaths of persons in the selected group by the corresponding number of persons in the mid-year population, the rate being expressed per thousand or per million. Exceptions to the use of estimated populations occur in the calculation of infant mortality rates (deaths of infants in various periods of the first year of life) which are based on the number of live births, and in the calculation of stillbirth and perinatal mortality rates (stillbirths and deaths of infants in the first week of life) which are based on the total number of births, both live and still. Maternal mortality rates (death rates of women associated with childbearing) are often expressed in terms of total live and still births. In these rates the deaths are those registered in the calendar year, but the live and still births are those which occurred in the year.

Standardised death rates are of two types, those used to compare mortality trends in a given area or group over the course of some years, and those used to compare death rates in different areas or groups in a given year.

The comparative mortality index (C.M.I.), which replaced the standardised death rate in use until 1941, is used to compare mortality trends in different years, after allowing for changes in the sex-age structure of the population. The methods of calculation and a discussion of its advantages over the former standardised rate may be found on pages 6–11 of the *Medical Text* volume for 1940–45. Briefly, it represents the ratio of the adjusted death rates of the year in question to those of a base year (at present 1938), each calculated by weighting the death rates of the various sex-age groups by the arithmetic mean of the corresponding proportions of the mid-year populations living in the two years. If the death rate of a sex-age group in the year to which the index relates is denoted by  $M$  and the corresponding rate in 1938 by  $M'$ , and if  $r$  and  $r'$  are the proportions of the total population falling within that group

$$\text{C.M.I.} = \Sigma M (r + r') / \Sigma M' (r + r')$$

where  $\Sigma$  denotes the summation over all the sex-age groups.

The comparative mortality index can only be used to make comparisons between years for the same category of persons, for example, either males or females. It cannot be used to compare the death rates of males with those of females in any year, because the age-structure of the standard population differs for the two sexes. This comparison can, however, be made with the **adjusted ratio of male to female mortality** shown in Table 3 of Part I of the *Review*. The method of calculation is similar to that of the C.M.I. except that the age-specific death rates for the two sexes are weighted by the mean of the corresponding proportions of the mid-year populations for the year in question.

**Area comparability factors (A.C.F.)** enable standardised comparison to be made of death rates for all causes in different areas. They are calculated by a method of indirect standardisation (fully described on pages 30, 32, and 57 of the 1954 *Commentary*). The area comparability factors for 1956 and 1957 have been adjusted so that they also spread the deaths and the populations in chronic sick and mental and mental deficiency hospitals over all areas in the country in proportion to the non-institutional population.

**Local adjusted death rates** are obtained by applying area comparability factors to the local crude death rates. They can be compared with the rate for England and Wales as a whole in the same year. The A.C.F.s shown in Table 12 of Part I should be used only for adjusting death rates from all causes. If it should be desired to compare local mortality rates for particular causes, a special series of area comparability factors would have to be calculated, based on mortality from those causes.

The **equivalent average death rate (E.A.D.R.)** is the arithmetic mean of the rates in quinquennial groups of ages over some convenient age range, e.g. 0–4, 5–9, up to 60–64, this being equivalent to calculating a standardised death rate at ages under 65 based on a population uniformly distributed over the 13 age-groups.

### The general trend of mortality

Table XXXVI (page 57) shows for each sex the crude death rate and the comparative mortality index for all ages during 1841 to 1957. The crude death rate of 12.3 per 1,000 living for males in 1957 was 0.2 per 1,000 less than the rate in 1956; the female rate also decreased by 0.2 per 1,000, from 10.9 in 1956 to 10.7 in 1957. The C.M.I., which takes into account the varying age-structure of the population from year to year, also showed decreases in 1957 as compared with 1956 for both sexes, and the female rate of 0.74 was the lowest for any of the single years shown in the table.

Table XXXVI. Crude annual death rates per 1,000 living, and comparative mortality indices, 1841-1950 and 1941 to 1957, England and Wales

Period	Crude death rate per 1,000 living		Comparative mortality index* (1938 base)	
	Males	Females	Males	Females
1841-1850 .. ..	23.1	21.6	2.12	2.44
1851-1860 .. ..	23.1	21.4	2.09	2.37
1861-1870 .. ..	23.7	21.4	2.14	2.37
1871-1880 .. ..	22.7	20.1	2.09	2.27
1881-1890 .. ..	20.3	18.1	1.93	2.10
1891-1900 .. ..	19.3	17.1	1.87	2.01
1901-1910 .. ..	16.4	14.4	1.60	1.69
1911-1920 .. ..	15.1	13.0	1.45	1.49
1921-1930 .. ..	12.9	11.4	1.16	1.22
1931-1940 .. ..	13.0	11.5	1.07	1.10
1941-1950 .. ..	12.5	10.9	0.92	0.89
1941 .. ..	14.0	11.8	1.10	1.04
1942 .. ..	12.5	10.5	0.97	0.92
1943 .. ..	12.7	11.1	0.98	0.94
1944 .. ..	12.6	10.7	0.95	0.89
1945 .. ..	12.3	10.7	0.92	0.88
1946 .. ..	12.2	10.9	0.89	0.88
1947 .. ..	12.9	11.2	0.92	0.89
1948 .. ..	11.5	10.1	0.82	0.79
1949 .. ..	12.3	11.1	0.86	0.85
1950 .. ..	12.3	11.0	0.85	0.83
1951 .. ..	13.4	11.8	0.92	0.88
1952 .. ..	12.2	10.5	0.84	0.78
1953 .. ..	12.2	10.7	0.84	0.78
1954 .. ..	12.2	10.5	0.83	0.76
1955 .. ..	12.5	10.9	0.84	0.77
1956 .. ..	12.5	10.9	0.84	0.76
1957 .. ..	12.3	10.7	0.83	0.74

\* Civilians only, 1914-1918 and 1939-1949.

Expectation of life

The expectation of life is the average number of years which would be lived by a group of people of given age who are continuously subject to given mortality rates, usually those of a selected year or years.

An abridged life table, based on the total deaths registered in 1955 to 1957 is shown in Table XXXVII (page 58). The columns headed  $l_x$  show the number of persons who would survive to given age  $x$  and those headed  $e_x$  show the average length of life which would be lived by persons aged  $x$  if they continued to be subject to the death rates of 1955-57. On this basis 97 per cent of males and 98 per cent of females might expect to reach the age of 5, and 96 per cent of males and 97 per cent of females to reach the age of 15. Seventy-eight per cent of men might expect to reach the age of 60, compared with 86 per cent of women, and the males could expect an average future lifetime of 15 years, compared with about 18 years 9 months for females.



Table XXXVII. Abridged life table, 1955-57, England and Wales

Males		Age $x$	Females	
$l_x$	$^{\circ}e_x$		$l_x$	$^{\circ}e_x$
10,000	67.71	0	10,000	73.29
9,731	68.58	1	9,793	73.84
9,715	67.69	2	9,778	72.95
9,706	66.75	3	9,769	72.02
9,698	65.80	4	9,763	71.06
9,691	64.85	5	9,758	70.10
9,668	60.00	10	9,741	65.21
9,648	55.12	15	9,726	60.31
9,606	50.35	20	9,707	55.42
9,552	45.62	25	9,680	50.57
9,499	40.86	30	9,645	45.75
9,437	36.11	35	9,595	40.97
9,346	31.44	40	9,524	36.26
9,204	26.89	45	9,413	31.66
8,959	22.55	50	9,243	27.19
8,529	18.56	55	8,989	22.89
7,819	15.02	60	8,609	18.79
6,791	11.92	65	8,019	14.99
5,447	9.24	70	7,118	11.57
3,870	6.99	75	5,784	8.66
2,246	5.24	80	4,047	6.31
943	4.02	85	2,167	4.61

This abridged life table is constructed from the estimated home population in 1955, 1956, and 1957, and the total deaths registered in those years.

The column headed  $l_x$  shows, for each sex, the numbers who would survive to exact age  $x$  out of 10,000 born who were subject throughout their lives to the recorded age death rates of the period.

Column  $^{\circ}e_x$  is the "expectation of life", that is, the average future lifetime which would be lived by persons aged exactly  $x$ , if likewise subject to those death rates.

Table XXXVIII (page 59) shows that in 1957 the expectation of life at birth was 68 years for males and 74 years for females. Those who survived the first year of life had expectations of 69 years and 74 years for the two sexes respectively.

**Table XXXVIII. Expectation of life at birth and at age 1 year, 1838-1932, and 1943 to 1957, England and Wales**

From English Life Table	Year	Expectation of life at			
		Birth		Age 1 year	
		Males	Females	Males	Females
No. 1 .. ..	1841	40	42	47	48
2 .. ..	1838-44	40	42	47	47
3 .. ..	1838-54	40	42	47	47
4 .. ..	1871-80	41	45	48	50
5 .. ..	1881-90	44	47	51	53
6 .. ..	1891-1900	44	48	52	55
7 .. ..	1901-10	49	52	56	58
8 .. ..	1910-12	52	55	58	60
9 .. ..	1920-22	56	60	60	63
10 .. ..	1930-32	59	63	62	65
11 .. ..	1950-52	66	72	68	72
From annual Abridged Life Tables	1943	62	67	64	69
	1944	62	68	64	70
	1945	63	69	65	71
	1946	65	69	67	71
	1947	64	69	67	71
	1948	66	71	68	72
	1949	66	71	68	72
	1950	67	71	68	72
	1951	66	71	67	72
	1952	67	72	68	73
	1953	67	72	68	73
	1954	68	73	69	74
	1955	68	73	68	74
	1956	68	73	69	74
	1957	68	74	69	74

### Seasonal variation in mortality

Table XXXIX (page 60) shows the annual death rates per 1,000 living for each quarter from 1931, and the ratio of each to the corresponding yearly rate taken as 100. In 1957 the highest rate, 13·4 per 1,000, occurred in the December quarter. In the other years, with the exception of 1943, the death rates were highest in the March quarter ; the death rate of 12·2 per 1,000 in 1957 was the lowest rate shown for this quarter.

**Table XXXIX. Annual death rates per 1,000 living, by quarters in each year 1931 to 1957, with ratios to each yearly rate taken as 100, England and Wales**

Year	Death rate per 1,000 living				Ratio to yearly rate taken as 100			
	March	June	September	December	March	June	September	December
1931	16.5	11.5	9.6	11.7	134	93	78	95
1932	15.4	11.6	9.7	11.5	128	97	81	96
1933	17.1	10.8	9.4	12.0	139	88	76	98
1934	14.6	11.8	9.6	11.2	124	100	81	95
1935	13.2	12.0	9.8	12.0	113	103	84	103
1936	15.1	11.8	9.7	12.0	125	98	80	99
1937	16.2	11.6	9.7	12.3	131	94	78	99
1938	13.6	11.6	9.9	11.5	117	100	85	99
1939	15.1	11.7	9.9	11.8	125	97	82	98
1940	20.6	11.9	10.8	14.1	143	83	75	98
1941	18.4	14.2	10.1	11.5	136	105	75	85
1942	15.8	12.0	9.8	11.6	128	98	80	94
1943	14.5	11.7	10.1	15.7	112	90	78	121
1944	15.3	12.0	11.0	12.7	120	94	87	100
1945	16.5	11.5	10.0	12.6	131	91	79	100
1946	15.4	11.2	9.7	11.9	128	93	81	99
1947	17.6	11.3	9.2	11.4	143	92	75	93
1948	12.4	10.3	9.4	11.7	113	94	85	106
1949	15.2	11.2	9.3	11.8	129	95	79	100
1950	14.0	11.1	9.3	12.3	120	95	80	106
1951	19.1	11.1	9.1	11.0	153	89	73	88
1952	13.4	10.6	8.9	12.4	119	94	79	110
1953	15.8	10.4	8.9	10.7	139	91	78	94
1954	14.0	10.6	9.3	11.4	124	94	82	101
1955	15.4	11.2	9.1	11.1	132	96	78	95
1956	15.3	10.8	9.3	11.3	131	92	79	97
1957	12.2	10.6	9.7	13.4	106	92	84	117

Table XXXIX is based on deaths registered in the four quarters ; the quarterly rates based on deaths occurring in the four quarters would be as follows for 1956 and 1957 :

Year	March quarter	June quarter	September quarter	December quarter
1956 ..	15.3	10.7	9.4	11.3
1957 ..	12.2	10.6	9.6	13.5

As 1956 was a leap year, the March quarter contained one more day than the corresponding quarter of 1957 ; a small decrease in the number of deaths occurring in the latter would therefore be expected. The following table (based on Table 23 of Part I) shows that for most of the 17 main diagnostic groups of the International Statistical Classification, the deaths in the first quarter were considerably fewer in 1957 than in 1956. In particular, deaths from diseases of the respiratory system in the March quarter of 1957 were only 54 per cent of



those in the corresponding quarter of 1956. It appears that the mild weather experienced in parts of the March quarter of 1957 had a beneficial effect in reducing mortality, not only from respiratory diseases, but from other causes as well.

I.S.C. Nos.	Cause of death	Deaths occurring in March quarter			Deaths occurring in December quarter		
		1956	1957	Decrease in 1957	1956	1957	Increase in 1957
001-138	Infective and parasitic diseases .. ..	2,730	2,069	661	1,967	2,178	211
140-239	Neoplasms .. ..	23,817	23,374	443	24,287	25,080	793
240-289	Allergic, endocrine system, metabolic, nutritional diseases	2,392	1,717	675	1,700	2,005	305
290-299	Diseases of blood and blood-forming organs	576	515	61	487	567	80
300-326	Mental, psychoneurotic and personality disorders .. ..	327	322	5	303	240	— 63
330-398	Diseases of the nervous system and sense organs .. ..	25,024	21,291	3,733	19,479	21,880	2,401
400-468	Diseases of the circulatory system .. ..	63,741	50,838	12,903	47,614	55,152	7,538
470-527	Diseases of the respiratory system .. ..	29,765	16,144	13,621	12,706	26,315	13,609
530-587	Diseases of the digestive system .. ..	4,644	4,114	530	3,830	4,117	287
590-637	Diseases of the genitourinary system .. ..	3,391	2,927	464	2,883	2,960	77
640-689	Deliveries and complications of pregnancy, etc. .. ..	110	86	24	103	81	— 22
690-716	Diseases of the skin and cellular tissue .. ..	146	103	43	105	138	33
720-749	Diseases of the bones and organs of movement .. ..	585	495	90	434	497	63
750-759	Congenital malformations .. ..	1,253	1,264	— 11	1,173	1,253	80
760-776	Certain diseases of early infancy .. ..	2,561	2,362	199	2,311	2,384	73
780-795	Symptoms, senility and ill-defined conditions	3,094	2,088	1,006	1,979	2,131	152
E800-E999	Accidents, poisonings, and violence (external cause) ..	5,923	5,317	606	5,487	6,094	607
All causes .. ..		170,079	135,026	35,053	126,848	153,072	26,224

For the December quarters the position was reversed, and for most of the diagnostic groups shown in the table the deaths in the fourth quarter of 1957 were in excess of those in the corresponding quarter of 1956. Deaths from diseases of the respiratory system in the December quarter of 1957 were more than double those in the corresponding quarter of 1956. One reason for the greater number of deaths in 1957 was the epidemic of Asian influenza which reached a peak in October and January but continued to cause increased

mortality for several months after. The numbers of deaths from respiratory diseases occurring in the last three months of 1956 and 1957 were as follows :

Cause of death (and I.S.C. Nos.)	Year	October	November	December
Influenza (480-483) .. .. . {	1956	39	88	125
	1957	3,527	827	788
Pneumonia (490-493) .. .. . {	1956	1,262	1,577	2,092
	1957	2,987	2,046	3,815
Bronchitis (500-502) .. .. . {	1956	1,504	2,133	2,710
	1957	2,963	2,397	5,334
Other respiratory diseases (Rem. 470-527) {	1956	316	401	459
	1957	505	433	693
Diseases of the respiratory system (470-527) {	1956	3,121	4,199	5,386
	1957	9,982	5,703	10,630

In particular the deaths in December 1957 were nearly double those in December 1956. This increase and the general increase in deaths in the last quarter of 1957 as compared with 1956 were the result of the influenza epidemic.

### Death rates by sex and age

Table XL (page 63) shows the trend in the average annual death rates by sex and age since 1841. The male rates at ages 5-64 and the female rates at ages under 65 were slightly higher in 1957 than in the preceding year. For both sexes there was a decrease in the rates at ages 65 and over. Whereas in 1951-55 the average male rate at ages 85 and over was 43.9 per 1,000 more than the female rate, in 1956 the male excess was 33.5 and in 1957 only 27.6 per 1,000.

### Causes of death at different ages

Table XLI (page 64) shows the death rates per million living from selected causes at different ages. Causes of death at ages under one year are discussed in the Infant Mortality chapter (pages 74-91).

Table XL. Average annual death rates per 1,000 living, by sex and age, 1841-1955, 1956 and 1957, England and Wales

	Males								Females							
	All ages	0-	5-	15-	25-	45-	65-	85 and over	All ages	0-	5-	15-	25-	45-	65-	85 and over
1841-1850	23.1	71.3	7.24	8.23	11.2	23.6	89.6	312.3	21.6	61.2	7.27	8.50	11.6	21.1	82.4	293.2
1851-1860	23.1	72.7	6.79	7.71	10.9	23.2	86.8	308.3	21.4	63.0	6.84	7.98	10.9	20.1	80.0	289.0
1861-1870	23.7	73.5	6.43	7.26	11.5	24.8	87.7	315.0	21.4	63.7	6.25	7.30	10.7	20.6	79.8	285.0
1871-1880	22.7	68.4	5.29	6.24	11.3	26.1	90.2	327.4	20.1	58.3	5.05	6.12	9.92	21.0	80.9	296.4
1881-1890	20.3	61.6	4.20	4.97	9.79	25.5	89.4	306.0	18.1	51.9	4.23	4.97	8.76	20.6	78.9	271.0
1891-1900	19.3	62.7	3.40	4.38	8.82	25.2	89.4	286.7	17.1	52.8	3.49	4.06	7.58	20.3	79.5	261.3
1901-1905	17.1	54.7	2.93	3.77	7.59	23.0	83.4	274.6	15.0	45.8	3.03	3.34	6.34	18.1	72.5	249.4
1906-1910	15.6	45.4	2.67	3.45	6.76	21.7	82.0	283.0	13.8	38.0	2.78	3.05	5.60	16.9	70.8	250.9
1911-1915	15.5	40.9	2.75	3.69	6.76	21.0	81.7	281.6	13.3	34.0	2.75	3.00	5.17	16.0	69.5	245.4
1916-1920	14.9	34.4	3.11	4.85	7.61	19.5	81.1	267.8	12.8	28.4	3.18	4.06	5.91	14.4	65.9	241.9
1921-1925	12.9	27.0	2.10	3.06	5.24	16.9	76.2	272.7	11.4	21.8	2.05	2.83	4.26	12.8	64.0	241.2
1926-1930	12.9	23.1	2.06	2.93	4.84	17.0	76.3	298.1	11.4	18.5	1.90	2.67	3.97	12.4	62.5	254.4
1931-1935	12.7	20.1	1.84	2.81	4.23	16.6	75.1	278.9	11.4	16.0	1.71	2.51	3.67	11.9	61.0	245.0
1936-1940	13.3	17.5	1.60	2.64	3.95	17.3	76.2	286.9	11.6	13.7	1.40	2.17	3.22	11.5	60.1	253.0
1941-1945	12.8	15.5	1.44	2.99	3.72	15.7	69.0	227.0	10.9	12.3	1.13	1.98	2.84	9.86	52.6	207.0
1946-1950	12.2	10.5	0.79	1.42	2.58	14.5	69.9	241.6	10.9	8.14	0.59	1.29	2.17	8.79	52.1	208.9
1951-1955	12.5	6.95	0.52	1.05	2.05	13.9	75.5	265.9	10.9	5.40	0.37	0.60	1.60	8.02	51.9	222.0
1956	12.5	6.49	0.43	0.93	1.85	13.5	75.8	256.2	10.9	4.98	0.30	0.45	1.40	7.55	51.0	222.7
1957	12.3	6.44	0.46	1.03	1.86	13.7	73.5	226.8	10.7	5.11	0.32	0.49	1.41	7.59	48.7	199.2



**Table XLI. Death rates by sex from certain causes at different periods of life, 1957, England and Wales**

(Classified in accordance with the International Abbreviated List, with certain subdivisions)

Abbreviated List Nos.	Cause of death		All ages	Under 4 weeks	4 weeks and under 1 year	1-	5-	15-	25-	45-	65-	75 and over
			Rates per million living	Rates per 1,000 birth occurrences		Rates per million living						
	Estimated mid-year population (in thousands)	{ M F	21,648 23,259	372,298* 351,083*		1,350 1,282	3,546 3,387	2,757 2,775	6,160 6,265	5,408 6,015	1,396 2,009	674 1,187
	<b>ALL CAUSES</b> .. ..	{ M F	12,306 10,682	18.68 14.10	7.09 6.20	1,039 898	462 323	1,029 494	1,856 1,406	13,706 7,591	54,000 30,916	133,534 102,060
B1	Tuberculosis of respiratory system ..	{ M F	146 47	0.00 0.00	0.01 0.00	1 3	1 1	8 9	73 72	284 54	605 88	436 91
B2	Tuberculosis, other forms	{ M F	12 12	— —	0.01 0.01	12 21	5 4	7 6	11 8	17 10	25 30	27 33
B3	Syphilis and its sequelae	{ M F	41 18	— —	— —	— —	0 0	0 3	6 20	62 64	239 125	252 125
B4	Typhoid fever .. ..	{ M F	0 0	— —	— —	1 —	0 —	— —	— —	0 —	1 —	1 —
B5	Cholera .. ..	{ M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
B6	Dysentery, all forms ..	{ M F	1 0	— —	0.01 0.01	1 1	— 0	— —	— —	1 0	1 1	3 2
B7	Scarlet fever and streptococcal sore throat	{ M F	1 1	— —	0.00 0.00	1 1	0 0	— —	1 0	0 1	1 1	1 2
B8	Diphtheria .. ..	{ M F	0 0	— —	— —	— —	— —	— —	— —	— —	— —	— —
B9	Whooping cough .. ..	{ M F	2 2	0.00 0.00	0.06 0.12	6 6	1 —	— —	0 —	— —	— —	— 1
B10	Meningococcal infections	{ M F	4 4	0.00 0.02	0.11 0.08	25 24	2 1	1 1	0 0	1 1	3 2	— 3
B11	Plague .. ..	{ M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
B12	Acute poliomyelitis ..	{ M F	7 4	— —	0.01 0.00	4 4	6 5	7 4	13 7	2 1	1 —	— 1
B13	Smallpox .. ..	{ M F	0 0	— —	— —	— —	0 —	— —	— —	— —	0 —	— —
B14	Measles .. ..	{ M F	2 2	— —	0.03 0.02	21 16	3 3	1 —	0 —	— —	— —	— —
B15	Typhus and other rickettsial diseases	{ M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
B16	Malaria .. ..	{ M F	0 0	— —	— —	— —	— —	— —	0 0	0 —	— —	— —
B17	All other diseases classified as infective and parasitic	{ M F	23 21	0.04 0.04	0.07 0.06	24 20	11 6	9 9	12 10	32 26	43 39	82 78
B18	Malignant neoplasm: (140-205)	{ M F	2,312 1,890	0.01 0.01	0.05 0.09	111 77	64 47	109 57	362 443	3,672 2,609	11,231 6,113	17,205 10,748
	stomach (151)	{ M F	369 258	— —	— —	— —	— —	1 1	41 27	558 243	1,893 977	3,074 2,031
	trachea, bronchus and lung (162, 163)	{ M F	759 116	— —	— —	1 —	0 —	4 1	96 25	1,671 200	3,658 390	2,493 458
	breast (170) .. ..	{ M F	3 370	— 0.00	— —	— —	— —	— 2	0 116	5 642	17 1,029	27 1,643
	uterus (171-174) ..	{ M F	169 60	— —	— —	— —	— —	— 2	— 67	— 286	— 512	— 644
	Leukaemia and aleukaemia (204)	{ M F	47 47	— —	0.01 0.03	55 42	28 21	27 12	27 25	74 56	194 117	312 164
	Other lymphatic and malignant neoplasms (Remainder of 140-205)	{ M F	1,121 929	0.01 0.01	0.04 0.05	56 35	35 26	76 39	198 184	1,364 1,182	5,468 3,088	11,300 5,808
	Benign and unspecified neoplasms	{ M F	34 38	0.03 0.01	0.02 0.03	12 12	7 8	6 10	17 22	59 60	95 92	154 101
	Diabetes mellitus ..	{ M F	47 91	— —	0.00 —	2 3	2 3	4 7	10 8	45 73	229 395	550 682
	Anaemias .. ..	{ M F	26 50	— —	0.01 0.02	2 4	2 2	3 4	3 6	16 29	118 143	399 537
B22	Vascular lesions affecting central nervous system	{ M F	1,411 1,854	0.02 —	0.03 0.02	4 5	6 5	15 13	79 80	1,098 1,063	6,894 5,985	21,372 20,342
B23	Nonmeningococcal meningitis	{ M F	12 7	0.06 0.07	0.18 0.08	19 21	3 1	3 3	4 2	10 3	23 10	22 12
B24	Rheumatic fever ..	{ M F	4 4	— —	— 0.01	1 1	3 5	3 6	4 4	5 3	6 4	6 7
B25	Chronic rheumatic heart disease	{ M F	128 225	— —	— —	— —	3 2	25 25	89 132	249 373	459 564	549 798

\* Live birth occurrences.

Table XLI—continued

Abbreviated List Nos.	Cause of death	All ages	Under 4 weeks	4 weeks and under 1 year	1-	5-	15-	25-	45-	65-	75 and over									
												Rates per million living	Rates per 1,000 birth occurrences	Rates per million living						
B26	Arteriosclerotic heart disease, including coronary disease (420)	M	2,208	—	—	—	—	3	221	3,240	11,555	18,972								
		F	1,226	—	0-00	—	0	0	28	805	5,201	10,989								
B27	Degenerative heart disease (421, 422)	M	1,123	—	—	1	2	5	21	354	4,042	24,619								
		F	1,490	—	—	2	1	1	11	235	2,900	23,034								
B28	Other diseases of heart...	M	219	0-01	0-00	4	3	6	21	200	1,062	2,994								
		F	222	0-00	0-01	4	1	8	14	120	716	2,433								
B29	Hypertension with heart disease	M	248	—	—	—	—	1	9	218	1,388	3,251								
		F	297	—	—	—	—	0	5	153	1,085	3,186								
B46	Hypertension without mention of heart	M	158	—	—	—	—	3	22	170	782	1,883								
		F	163	—	—	—	1	1	10	97	542	1,732								
(Pt.)	Other circulatory diseases (450-468)	M	326	0-00	0-01	1	1	6	18	194	1,364	5,901								
		F	364	—	0-01	—	1	6	22	138	860	4,847								
B30	Influenza...	M	164	0-01	0-10	40	30	46	40	229	734	1,062								
		F	136	0-01	0-09	28	42	53	44	122	391	849								
B31	Pneumonia	M	537	—	2-20	141	26	33	50	423	2,159	7,138								
		F	481	—	1-84	153	27	26	45	226	1,180	5,199								
B32	Bronchitis	M	876	0-03	0-42	39	5	4	38	1,102	4,863	8,503								
		F	343	0-05	0-30	34	6	5	21	201	1,104	3,547								
B46	Other diseases of respiratory system (470-475, 510-527)	M	161	0-03	0-09	21	9	10	31	258	780	1,024								
		F	61	0-03	0-09	19	6	6	17	53	144	501								
B33	Ulcer of stomach and duodenum	M	165	0-00	0-01	—	1	4	25	223	819	1,549								
		F	63	0-00	—	1	0	2	7	45	217	596								
B34	Appendicitis	M	23	—	0-00	10	8	9	9	29	90	129								
		F	13	0-00	—	5	5	4	4	13	38	73								
B35	Intestinal obstruction and hernia	M	67	0-22	0-09	15	2	3	6	59	305	751								
		F	63	0-09	0-08	5	1	0	4	47	218	550								
B36	Gastritis, enteritis and diarrhoea, except diarrhoea of newborn	M	42	—	0-46	34	3	3	12	43	127	289								
		F	56	0-01	0-33	23	3	8	12	41	151	419								
B37	Cirrhosis of liver	M	31	—	0-02	1	1	1	12	58	126	122								
		F	23	—	0-01	2	1	1	6	39	89	62								
B38	Nephritis and nephrosis	M	108	—	0-02	7	13	40	62	145	338	791								
		F	87	—	0-02	7	8	27	38	96	246	500								
B39	Hyperplasia of prostate	M	168	—	—	—	—	—	0	44	694	3,613								
		F	15	—	—	—	0	22	43	2	1	1								
B40	Complications of pregnancy, childbirth and puerperium	M	120	2-96	1-76	131	32	27	25	39	48	43								
		F	101	2-70	1-83	119	25	19	22	38	31	28								
B42	Birth injuries, postnatal asphyxia and atelectasis	M	132	7-59	0-06	2	—	—	—	—	—	—								
		F	79	5-13	0-08	—	—	—	—	—	—	—								
B43	Diarrhoea of newborn (764)	M	1	0-06	—	—	—	—	—	—	—	—								
		F	1	0-04	—	—	—	—	—	—	—	—								
B44	Other infections of newborn (763, 765-768)	M	21	1-22	0-01	—	—	—	—	—	—	—								
		F	13	0-87	0-02	—	—	—	—	—	—	—								
B45	Other diseases of early infancy and immaturity unqualified	M	106	6-04	0-08	4	—	—	—	—	—	—								
		F	71	4-67	0-05	2	—	—	—	—	—	—								
B46	Senility without mention of psychosis, ill-defined and unknown causes	M	125	0-05	0-04	1	1	1	2	4	109	3,665								
		F	206	0-03	0-01	2	—	1	1	5	77	3,858								
(Rem.)	All other diseases (Remainder 001-795)	M	363	0-15	0-49	104	47	76	108	436	1,446	3,052								
		F	463	0-14	0-39	99	37	59	131	466	1,429	3,104								
BE47	Motor vehicle accidents	M	170	—	0-01	78	71	315	146	142	263	604								
		F	53	—	0-01	55	31	44	23	47	117	222								
BE48	All other accidents	M	268	0-12	0-59	147	87	184	172	254	511	2,036								
		F	224	0-16	0-46	107	27	21	32	94	407	2,627								
BE49	Suicide and self-inflicted injury	M	146	—	—	—	1	43	114	270	404	475								
		F	92	—	—	—	0	21	64	177	230	136								
BE50	Homicide and operations of war	M	10	0-02	0-03	9	4	7	5	16	19	12								
		F	6	0-01	0-02	12	5	3	5	3	7	6								
BN47	Fractures, head injuries and internal injuries	M	318	0-01	0-05	103	92	383	239	302	596	2,080								
		F	195	0-01	0-04	72	37	48	31	75	371	2,341								
BN48	Burns	M	13	—	0-01	21	2	10	8	9	21	108								
		F	17	—	0-01	34	8	5	3	12	38	127								
BN49	Effects of poisons	M	116	—	0-02	21	5	37	92	194	297	479								
		F	103	0-00	0-03	18	5	22	58	172	240	341								
BN50	All other injuries	M	147	0-13	0-54	88	63	118	99	178	282	458								
		F	59	0-16	0-41	50	14	14	32	63	113	181								

The five chief causes of death in each sex-age group and the death rate per million living were as follows :

Age 1-4 : males	..	Malignant neoplasms, 111 ; pneumonia, 141 ; congenital malformations, 131 ; motor vehicle accidents, 78 ; all other accidents, 147.
females	..	Malignant neoplasms, 77 ; pneumonia, 153 ; congenital malformations, 119 ; motor vehicle accidents, 55 ; all other accidents, 107.
Age 5-14 : males	..	Malignant neoplasms, 64 ; influenza, 30 ; motor vehicle accidents, 71 ; all other accidents, 87 ; congenital malformations, 32.
females	..	Malignant neoplasms, 47 ; influenza, 42 ; motor vehicle accidents, 31 ; all other accidents, 27 ; pneumonia, 27.
Age 15-24 : males	..	Malignant neoplasms, 109 ; influenza, 46 ; motor vehicle accidents, 315 ; all other accidents, 184 ; suicide, 43.
females	..	Malignant neoplasms, 57 ; influenza, 53 ; motor vehicle accidents, 44 ; nephritis and nephrosis, 27 ; pneumonia, 26.
Age 25-44 : males	..	Malignant neoplasms, 362 ; suicide, 114 ; arteriosclerotic heart disease, including coronary disease, 221 ; motor vehicle accidents, 146 ; all other accidents, 172.
females	..	Malignant neoplasms, 443 ; suicide, 64 ; respiratory tuberculosis, 72 ; vascular lesions affecting the central nervous system, 80 ; chronic rheumatic heart disease, 132.
Age 45-64 : males	..	Malignant neoplasms, 3,672 ; vascular lesions affecting the central nervous system, 1,098 ; arteriosclerotic heart disease, including coronary disease, 3,240 ; pneumonia, 423 ; bronchitis, 1,102.
females	..	Malignant neoplasms, 2,609 ; vascular lesions affecting the central nervous system, 1,063 ; arteriosclerotic heart disease, including coronary disease, 805 ; chronic rheumatic heart disease, 373 ; degenerative heart disease, 235.
Age 65-74 : males	..	Malignant neoplasms, 11,231 ; vascular lesions affecting the central nervous system, 6,894 ; arteriosclerotic heart disease, including coronary disease, 11,555 ; degenerative heart disease, 4,042 ; bronchitis, 4,863.
females	..	Malignant neoplasms, 6,113 ; vascular lesions affecting the central nervous system, 5,985 ; arteriosclerotic heart disease, including coronary disease, 5,201 ; degenerative heart disease, 2,900 ; pneumonia, 1,180.



## Age 75 and over :

males	..	Malignant neoplasms, 17,205 ; vascular lesions affecting the central nervous system, 21,372 ; arteriosclerotic heart disease, including coronary disease, 18,972 ; degenerative heart disease, 24,619 ; bronchitis, 8,503.
females	..	Malignant neoplasms, 10,748 ; vascular lesions affecting the central nervous system, 20,342 ; arteriosclerotic heart disease, including coronary disease, 10,989 ; degenerative heart disease, 23,034 ; pneumonia, 5,199.

## Death rates by sex and age in different parts of England and Wales

Table XLII (page 68) gives the death rates per 1,000 living by sex and age in standard regions and urban and rural aggregates within regional groups for 1957.

In 1957, as in 1956, the crude death rates in the conurbations were highest for both males and females in the West Yorkshire conurbation: 14·0 and 12·4 per 1,000 living respectively. The highest crude death rates in the regional groups were 14·1 for males and 12·5 for females in Wales II; the lowest rates were 11·2 for males in the Eastern and Southern regions and 9·67 for females in the Midland region.

In the areas outside the conurbations, namely, urban areas with populations of 100,000 and over, of 50,000 and under 100,000, and of under 50,000, and rural districts, the highest rates for both males and females aged 65 and over occurred in the North of England and in Wales.

## Percentage of deaths by cause in which a post-mortem was performed or there was record of an operation

Table XLIII (page 70) shows the number of deaths in which a post-mortem was performed or there was a record of an operation being performed, classified by sex, age, and cause of death, and expressed as a percentage of all deaths from the same cause in the corresponding sex-age group. The table therefore gives some indication of the extent to which any cause of death may be said to have been confirmed.

For all causes of death 23 per cent had one of these procedures mentioned on the death certificate, 27 per cent for males and 20 per cent for females. A high percentage of certificates mentioning either an operation or a post-mortem occurred, for males, in deaths from meningococcal infections, 67; ulcer of stomach and duodenum, 63; and for females, maternal causes, 75; meningococcal infections, 71.

Table XLII. All causes : Death rates per 1,000 living, by sex and age, in standard regions and urban and rural aggregates within regional groups, 1957, England and Wales

	Males						Females					
	All ages	0-	5-	15-	45-	65 and over	All ages	0-	5-	15-	45-	65 and over
ENGLAND AND WALES												
Urban and rural aggregates :	12.3	6.44	0.46	1.60	13.7	79.9	10.7	5.11	0.32	1.13	7.59	57.3
Conurbations .. .. .	12.3	6.24	0.42	1.65	14.6	83.4	10.5	5.05	0.29	1.14	7.78	58.2
<i>Areas outside conurbations :</i>												
Urban areas with populations of 100,000 and over ..	12.6	6.61	0.48	1.60	14.8	83.0	10.7	5.04	0.35	1.14	7.84	58.1
Urban areas with populations of 50,000 and under 100,000 ..	12.5	6.81	0.39	1.61	13.7	80.7	11.0	5.16	0.33	1.18	7.57	56.3
Urban areas with populations under 50,000 .. .. .	12.8	6.57	0.49	1.55	13.3	79.2	11.0	5.28	0.32	1.10	7.47	56.8
Rural districts .. .. .	11.5	6.41	0.52	1.56	11.6	73.6	10.5	5.04	0.36	1.08	7.16	56.6
NORTH OF ENGLAND												
Regions :												
Northern .. .. .	12.6	7.55	0.46	1.91	14.8	81.8	10.6	5.88	0.42	1.27	8.28	62.3
East and West Ridings .. .. .	12.9	6.87	0.51	1.69	14.7	83.2	10.9	5.56	0.39	1.19	8.30	60.1
North Western .. .. .	13.7	7.48	0.48	1.77	16.0	88.2	11.8	5.60	0.31	1.32	8.51	64.3
Total .. .. .	13.2	7.32	0.49	1.78	15.3	85.1	11.3	5.66	0.36	1.27	8.40	62.6
Conurbations :												
Tyneside .. .. .	13.0	7.19	0.39	1.95	16.1	85.3	10.4	5.31	0.31	1.26	8.42	63.0
West Yorkshire .. .. .	14.0	6.32	0.58	1.76	15.8	88.5	12.4	5.77	0.31	1.26	8.97	63.5
South East Lancashire .. .. .	13.7	7.45	0.49	1.79	16.2	89.7	12.0	5.67	0.30	1.27	8.74	65.4
Merseyside .. .. .	12.7	7.06	0.39	1.74	17.2	91.0	10.5	5.93	0.28	1.41	8.48	62.3
Total .. .. .	13.5	7.04	0.47	1.79	16.3	89.0	11.6	5.71	0.30	1.30	8.72	63.9
<i>Areas outside conurbations :</i>												
Urban areas with populations of 100,000 and over ..	13.2	7.43	0.48	1.72	16.3	84.8	10.6	5.50	0.46	1.20	8.20	59.6
Urban areas with populations of 50,000 and under 100,000 ..	13.6	8.21	0.40	1.70	15.3	86.1	11.5	6.12	0.41	1.43	8.43	62.1
Urban areas with populations under 50,000 .. .. .	13.5	7.39	0.51	1.82	14.6	83.7	11.4	5.40	0.37	1.19	8.21	63.5
Rural districts .. .. .	11.6	7.53	0.54	1.77	12.5	76.0	10.5	5.73	0.41	1.25	7.67	60.5
MIDLANDS AND EASTERN												
Regions :												
North Midland .. .. .	11.5	6.20	0.51	1.58	12.4	75.5	9.86	5.12	0.33	1.13	7.27	55.6
Midland .. .. .	11.5	6.68	0.36	1.75	14.2	80.4	9.67	5.38	0.33	1.09	7.61	57.7
Eastern .. .. .	11.2	5.71	0.45	1.36	11.3	72.6	10.2	4.46	0.31	0.97	6.86	53.3
Total .. .. .	11.4	6.24	0.43	1.58	12.8	76.3	9.89	5.03	0.32	1.07	7.28	55.6

Conurbation :										
West Midlands .. .. .										
<i>Areas outside conurbation :</i>										
Urban areas with populations of 100,000 and over										
Urban areas with populations of 50,000 and under 100,000										
Urban areas with populations under 50,000 .. .. .										
Rural districts .. .. .										
GREATER LONDON .. .. .	11.6	6.49	0.35	1.85	15.1	84.1	9.55	5.28	0.35	1.08
SOUTH OF ENGLAND										
Regions :										
London and South Eastern (excluding Greater London) ..										
Southern .. .. .										
South Western .. .. .										
Total .. .. .										
Urban areas with populations of 100,000 and over										
Urban areas with populations of 50,000 and under 100,000										
Urban areas with populations under 50,000 .. .. .										
Rural districts .. .. .										
WALES (including Monmouthshire)	11.7	5.46	0.40	1.49	13.3	79.0	10.0	4.38	0.27	1.04
Regions :										
Wales I (South East) .. .. .										
Wales II (Remainder) .. .. .										
Urban areas with populations of 100,000 and over										
Urban area with population of 50,000 and under 100,000										
Urban areas with populations under 50,000 .. .. .										
Rural districts .. .. .										



Table XLIII. Deaths from certain causes : (a) by sex and age ; (b) distinguishing deaths in which a post-mortem was performed or there was a record of operation, and (c) the percentage to all deaths, 1957, England and Wales

Cause of death (and I.S.C. Nos.)	Males				Females				Persons	
	All ages	0-15	45-	65 and over	All ages	0-15	45-	65 and over		
All causes	266,407 71,125 27	12,632 6,268 50	14,268 6,940 49	74,121 25,943 35	165,386 31,974 19	248,463 49,179 20	9,374 4,381 47	10,177 4,145 41	45,657 13,673 30	514,870 120,304 23
Tuberculosis, respiratory (001-008)	3,150 976 31	8 3 38	469 163 35	1,534 487 32	1,139 323 28	1,099 254 23	8 7 88	479 103 22	327 80 24	4,249 1,230 29
Tuberculosis, other (010-019)	264 142 54	38 16 42	83 45 54	90 53 59	53 28 53	271 156 58	43 21 49	68 39 57	60 38 63	535 298 56
Syphilitic disease .. (020-029)	879 479 54	1 1 100	41 26 63	333 175 53	504 277 55	413 236 57	— — —	16 7 44	121 61 50	1,292 715 55
Diphtheria (055)	2 1 50	2 1 50	— — —	— — —	— — —	4 1 25	— — —	1 — —	2 1 50	6 2 33
Whooping cough .. (056)	33 9 27	32 9 28	1 — —	— — —	— — —	55 18 33	54 18 33	— — —	1 — —	88 27 31
Meningococcal infections (057)	94 63 67	82 56 68	3 2 67	5 3 60	4 2 50	90 64 71	70 52 74	5 3 60	7 4 57	184 127 69
Acute poliomyelitis (080)	143 58 41	32 13 41	101 39 39	9 6 67	1 — —	84 37 44	23 13 57	55 22 40	4 2 50	227 95 42
Measles .. (085)	54 22 41	50 22 44	4 — —	— — —	— — —	41 14 34	40 14 35	— — —	1 — —	95 36 38

Other infective, parasitic diseases (030-054, 058-074, 081-084, 086-138)	(a) (b) (c)	525 260 50	119 80 67	104 66 63	181 84 46	121 30 25	531 231 44	89 58 65	89 52 58	168 68 40	185 83 29	1,056 491 46
Malignant neoplasm:												
Stomach ..	(a) (b) (c)	7,986 1,522 19	— — —	254 44 17	3,017 665 22	4,715 813 17	6,009 866 14	— — —	172 34 20	1,463 258 18	4,374 574 13	13,995 2,388 17
Lung, bronchus (162, 163)	(a) (b) (c)	16,430 3,487 21	2 — —	602 139 23	9,039 1,973 22	6,787 1,375 20	2,689 611 23	— — —	158 34 22	1,204 289 24	1,327 288 22	19,119 4,098 21
Breast ..	(a) (b) (c)	70 13 19	— — —	1 — —	27 7 26	42 6 14	8,613 1,772 21	1 1 100	732 167 23	3,862 910 24	4,018 694 17	8,683 1,785 21
Uterus (171-174)	(a) (b) (c)	— — —	— — —	— — —	— — —	— — —	3,939 608 15	— — —	425 56 13	1,722 309 18	1,792 243 14	3,939 608 15
Other malignant and lymphatic neoplasms (140-150, 152-161, 164, 165, 175-203, 205)	(a) (b) (c)	24,269 5,589 23	216 80 37	1,429 424 30	7,375 1,956 27	15,249 3,129 21	21,618 4,765 22	155 59 38	1,259 322 26	7,107 1,748 25	13,097 2,636 20	45,887 10,354 23
Leukaemia, aleukaemia (204)	(a) (b) (c)	1,301 304 23	178 42 24	244 54 22	398 103 26	481 105 22	1,093 253 23	138 31 22	189 42 22	335 85 25	431 95 22	2,394 557 23
Diabetes ..	(a) (b) (c)	1,013 228 23	11 7 64	71 37 52	241 71 29	690 113 16	2,124 393 19	15 10 67	67 29 43	440 122 28	1,602 232 14	3,137 621 20
Vascular lesions affecting central nervous system (330-334)	(a) (b) (c)	30,537 3,518 12	43 34 79	529 297 56	5,936 1,535 26	24,029 1,652 7	43,132 4,369 10	30 23 77	537 272 51	6,396 1,590 25	36,169 2,484 7	73,669 7,887 11
Coronary disease, angina (420)	(a) (b) (c)	47,809 17,580 37	— — —	1,367 938 69	17,524 7,845 45	28,918 8,797 30	28,515 7,533 26	2 2 100	177 97 55	4,843 1,628 34	23,493 5,806 25	76,324 25,113 33
Hypertension with heart disease (440-443)	(a) (b) (c)	5,368 844 16	— — —	59 27 46	1,181 315 27	4,128 502 12	6,914 771 10	— — —	32 16 50	920 199 22	5,962 506 8	12,282 1,565 13

Table XLIII—continued

Cause of death (and I.S.C. Nos.)	Males				Females				Persons		
	All ages	0-	15-	45-	65 and over	All ages	0-	15-		45-	65 and over
Other heart disease (410-416, 421-434)	32,038 (a) 3,255 (b) 10 (c)	37 23 62	909 384 42	4,345 1,166 27	26,747 (a) 1,682 (b) 6 (c)	45,056 (a) 3,526 (b) 8 (c)	27 14 52	1,075 388 36	4,380 962 22	39,574 (a) 2,162 (b) 5 (c)	All ages
Other circulatory disease (444-468)	10,490 (a) 2,963 (b) 28 (c)	8 6 75	269 139 52	1,972 948 48	8,241 (a) 1,870 (b) 23 (c)	12,266 (a) 3,027 (b) 25 (c)	7 7 100	222 110 50	1,412 666 47	10,625 (a) 2,244 (b) 21 (c)	77,094 (a) 6,781 (b) 9 (c)
Influenza (480-483)	3,553 (a) 665 (b) 19 (c)	201 91 45	372 163 44	1,240 256 21	1,740 (a) 1,551 (b) 9 (c)	3,163 (a) 541 (b) 17 (c)	213 91 43	424 169 40	732 171 23	1,794 (a) 110 (b) 6 (c)	6,716 (a) 1,206 (b) 18 (c)
Pneumonia (490-493, 763)	12,045 (a) 3,847 (b) 32 (c)	1,529 964 63	401 195 49	2,290 988 43	7,825 (a) 1,700 (b) 22 (c)	11,473 (a) 2,716 (b) 24 (c)	1,220 703 58	352 189 54	1,359 530 39	8,542 (a) 1,294 (b) 15 (c)	23,518 (a) 6,563 (b) 28 (c)
Bronchitis (500-502)	18,962 (a) 2,949 (b) 16 (c)	237 167 70	248 93 38	5,957 1,204 20	12,520 (a) 1,485 (b) 12 (c)	7,973 (a) 1,130 (b) 14 (c)	189 118 62	146 69 47	1,210 297 25	6,428 (a) 646 (b) 10 (c)	26,935 (a) 4,079 (b) 15 (c)
Other diseases of respiratory system (470-475, 510-527)	3,494 (a) 1,624 (b) 46 (c)	104 82 79	217 102 47	1,394 731 52	1,779 (a) 709 (b) 40 (c)	1,410 (a) 433 (b) 31 (c)	85 58 68	125 61 49	316 111 35	884 (a) 203 (b) 23 (c)	4,904 (a) 2,057 (b) 42 (c)
Ulcer of stomach and duodenum (540, 541)	3,568 (a) 2,243 (b) 63 (c)	5 4 80	167 123 74	1,208 887 73	2,188 (a) 1,229 (b) 56 (c)	1,461 (a) 824 (b) 56 (c)	3 2 67	46 39 85	269 193 72	1,143 (a) 590 (b) 52 (c)	5,029 (a) 3,067 (b) 61 (c)
Gastritis, enteritis and diarrhoea (543, 571, 572, 764)	937 (a) 506 (b) 54 (c)	247 113 46	84 57 68	234 150 64	372 (a) 186 (b) 50 (c)	1,315 (a) 635 (b) 48 (c)	169 87 51	101 65 64	245 149 61	800 (a) 334 (b) 42 (c)	2,252 (a) 1,141 (b) 51 (c)
Nephritis and nephrosis (590-594)	2,345 (a) 551 (b) 23 (c)	65 34 52	490 146 30	785 204 26	1,005 (a) 167 (b) 17 (c)	2,014 (a) 441 (b) 22 (c)	41 12 29	310 80 26	575 161 28	1,088 (a) 188 (b) 17 (c)	4,359 (a) 992 (b) 23 (c)



Hyperplasia of prostate .. (610)	(a) (b) (c)	3,645 1,599 44	— — —	1 100	240 166 69	3,404 1,432 42	— — —	— — —	— — —	3,645 1,599 44
Pregnancy, childbirth, abortion .. (640-689)	(a) (b) (c)	— — —	— — —	— — —	— — —	— — —	349 263 75	1 1 100	333 254 76	349 263 75
Congenital malformations (750-759)	(a) (b) (c)	2,589 1,323 51	2,050 1,010 49	230 152 66	213 105 49	96 56 58	2,341 1,031 44	1,827 773 42	190 110 58	4,930 2,354 48
Other defined and ill-defined diseases (210-254, 270-326, 340-402, 530-539, 542, 544-570, 573-587, 600-609, 611-637, 690-749, 760-762, 765-795)	(a) (b) (c)	19,956 6,996 35	6,160 2,728 44	1,304 640 49	3,662 1,535 42	8,830 2,093 24	23,705 7,069 30	4,256 1,823 43	1,367 645 47	43,661 14,065 32
Motor vehicle accidents .. (E810-835)	(a) (b) (c)	3,673 2,178 59	359 159 44	1,771 1,037 59	769 501 65	774 481 62	1,225 733 60	177 76 43	268 160 60	4,898 2,911 59
All other accidents (E800-802, 840-962)	(a) (b) (c)	5,797 3,316 57	770 488 63	1,568 869 55	1,373 895 65	2,086 1,064 51	5,203 2,453 47	445 275 62	256 172 67	11,000 5,769 52
Suicide (E963, 970-979)	(a) (b) (c)	3,170 1,869 59	3 1 33	823 503 61	1,460 869 60	884 496 56	2,146 1,355 63	1 1 100	458 305 67	5,316 3,224 61
Homicide and operations of war (E964, 965, 980-999)	(a) (b) (c)	218 146 67	43 34 79	52 35 67	89 60 67	34 17 50	129 100 78	45 31 69	43 34 79	347 246 71

## INFANT MORTALITY

Live births and stillbirths (of 28 weeks' gestation or more) together amounted to 739,996 in 1957. The number of live births was 723,381 and the number of stillbirths 16,615; the number of children who died during the first year of life was 16,720. The infant mortality rate was 23.1 and the early neonatal rate (deaths in the first week) 14.1 per thousand live births; the stillbirth rate was 22.5 per thousand total birth occurrences. Both the infant mortality and the neonatal rate are the lowest yet recorded in England and Wales, as is shown in Table XLIV (page 76). More than 60 per cent of the infant mortality occurred in the first week of life, compared with just under 40 per cent in 1947 when the infant mortality rate was 41.4 and the early neonatal mortality rate 16.5. The late neonatal rate (deaths at one to four weeks) fell in the same period from 6.2 to 2.4, the post-neonatal mortality rate (deaths at four weeks and under one year) from 18.6 to 6.7, and the stillbirth rate from 24.1 to 22.5. The recent trends of these rates are set out in Table XLV (page 78) which also shows the corresponding rates among illegitimate infants. In each instance the rate among the illegitimate children is higher than the rate for all children, the early neonatal rate in 1957 being some 40 per cent higher, the late neonatal rate 21 per cent and the post-neonatal rate 9 per cent higher. In 1947 the illegitimate early neonatal rate bore approximately the same relation to the current all infants figure as in 1957 but the late neonatal rate was 60 per cent higher and the post-neonatal rate 33 per cent higher. The stillbirth rate among illegitimate children was 28.7 per 1,000 total births in 1957, and 30.6 in 1947, in both years the illegitimate rate being about 27 per cent higher than the all infants rate.

The sex ratio of male to female infant mortality was 1.27 to 1, which was somewhat lower than that in recent years. The stillbirth sex ratio was particularly low, being the lowest recorded during the last 20 years. The next lowest

	1951	1952	1953	1954	1955	1956	1957
	M/F ratio						
Total infant mortality .. ..	1.31	1.28	1.26	1.31	1.31	1.32	1.27
Congenital malformations .. ..	1.09	1.03	1.01	1.02	1.07	1.06	1.04
Other prenatal causes .. ..	1.42	1.38	1.35	1.42	1.37	1.38	1.39
Other postnatal causes .. ..	1.27	1.27	1.27	1.33	1.36	1.40	1.24
Stillbirths .. ..	1.11	1.09	1.06	1.03	1.04	1.04	1.01

was of infants who died as a result of a congenital malformation. About two-thirds of persons of all ages who die from a cause assigned to congenital malformations (I.S.C. Nos. 750-759) die during the first year of life, but such conditions as monstrosity, spina bifida and meningocele, cleft palate, congenital pyloric stenosis, and imperforate anus, if they cause death at all do so in infancy. The sex ratio in these conditions shows some interesting variations. For the

years 1953-57 the average ratio of male to female infant mortality is given below with the infant mortality per thousand live births.

	M/F ratio	Infant mortality rate
Monstrosity .. .. .	0.57 : 1	0.18
Spina bifida and meningocele .. .. .	0.69 : 1	1.34
Cleft palate .. .. .	1.00 : 1	0.03
Congenital pyloric stenosis .. .. .	5.00 : 1	0.06
Imperforate anus .. .. .	2.67 : 1	0.05
Other digestive malformations .. .. .	1.55 : 1	0.40
Circulatory malformations .. .. .	1.26 : 1	1.68
Polycystic kidney .. .. .	1.67 : 1	0.04
Other malformations of the genito-urinary system .. .. .	3.33 : 1	0.13
Malformations of bones and joints .. .. .	1.00 : 1	0.05
Congenital hydrocephalus .. .. .	0.95 : 1	0.20

Considering first the sex ratio, and comparing it with that for total infant mortality for the same period of about 1.3 to 1, there is seen to be a large female excess for two conditions, monstrosity and spina bifida and meningocele and a large male excess for congenital pyloric stenosis, imperforate anus and other malformations of the genito-urinary system. In the remaining conditions the sex mortality ratio does not deviate markedly from that for the total infant mortality.

Recent morbidity surveys, notably that by Grundy and Lewis-Faning\*, show that the incidence of these conditions per thousand live births is much higher than the infant mortality as given above. Such conditions as hypertrophic pyloric stenosis and imperforate anus, though rapidly lethal if untreated, are amenable to surgery, while many of the remaining conditions are not incompatible with life. For example, the incidence of cleft palate was found to be 1.5 per thousand live births and that of congenital abnormalities of bones and joints 6.6 per thousand. In the former case surgical intervention probably prevented many deaths, while in the latter many of the malformations were not in themselves lethal. The recent history of mortality from congenital pyloric stenosis suggests the part that treatment can play in its control. In the survey cited above the incidence of this condition was three per thousand live births with a sex ratio of nearly 4 to 1. The national infant mortality rates in 1937, 1947, and 1957 were:

	1937	1947	1957
Male .. .. .	1.04	0.58	0.070
Female .. .. .	0.33	0.17	0.020
M/F Sex ratio .. .. .	3.2	3.4	3.5

At present three conditions, monstrosity, spina bifida, and malformations of the circulatory system, account for about four-fifths of the mortality due to congenital malformations, and in the light of present medical knowledge it would appear that little can be done to improve mortality under the first two heads, though recent improvements in cardiac surgery hold out hope for progress in malformations of the heart and great vessels.

\* Morbidity and Mortality in the first year of life. The Eugenics Society, 1957.



Table XLIV. Long term trend of stillbirths per 1,000 total births, 1928 to 1957, and of deaths in the neonatal, post-neonatal and other age periods under 1 year per 1,000 live births, 1906-1950, and 1928 to 1957, England and Wales

Period	Infant mortality per 1,000 live births* at various ages										Stillbirths and infant deaths—rates per 1,000 total births†				
	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year "wastage"	Stillbirths (late foetal deaths, at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week "perinatal mortality"	Infant deaths at 1 week and over "infantile mortality"	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
1906-1910	117.1	40.2	24.5	15.7	76.9	11.5	13.0	22.8	22.0	32.1	—	—	—	—	—
1911-1915	108.7	39.0	24.1	14.9	69.8	11.4	12.7	20.2	19.6	30.0	—	—	—	—	—
1916-1920	90.9	37.0	23.4	13.7	53.9	11.0	12.4	16.5	14.6	22.8	—	—	—	—	—
1921-1925	74.9	33.4	21.7	11.7	41.6	10.4	11.3	12.8	11.3	17.5	—	—	—	—	—
1926-1930	67.6	31.8	21.8	9.9	35.7	10.3	11.5	10.8	9.5	15.4	—	—	—	—	—
1931-1935	61.9	31.4	22.4	9.0	30.5	10.7	11.7	9.9	8.5	12.1	—	—	—	—	—
1936-1940	55.3	29.2	21.5	7.7	26.0	10.4	11.2	8.8	7.8	9.4	—	—	—	—	—
1941-1945	49.8	26.0	18.7	7.2	23.8	9.3	9.5	8.9	7.7	7.2	—	—	—	—	—
1946-1950	36.3	21.1	16.2	4.9	15.2	7.9	8.4	5.8	5.0	4.4	—	—	—	—	—
1928	65.3	31.1	21.6	9.5	34.2	10.4	11.2	10.7	9.3	14.2	102.6	40.1	60.8	41.7	69.9
1929	73.9	32.8	22.2	10.5	41.1	10.4	11.9	11.5	10.6	19.0	111.4	40.0	61.4	50.0	71.6
1930	60.2	30.9	22.0	8.9	29.3	10.4	11.6	9.7	7.9	11.7	98.3	40.8	61.9	36.4	70.4
1931	65.7	31.5	22.1	9.5	34.2	10.4	11.7	10.8	9.2	14.2	104.5	40.9	62.1	42.4	71.2
1932	64.5	31.5	22.4	9.2	33.0	10.6	11.8	10.8	9.0	13.2	103.7	41.3	62.8	40.8	71.6
1933	62.7	32.1	22.9	9.3	32.6	11.0	11.8	9.8	8.6	12.2	102.5	41.4	63.4	39.1	72.3
1934	59.3	31.4	22.7	8.7	27.9	10.9	11.8	8.9	7.7	11.3	96.7	40.5	62.2	34.5	70.5
1935	57.0	30.4	22.0	8.4	26.6	10.7	11.3	9.1	7.7	9.8	95.4	40.7	61.9	33.5	69.9
1936	58.7	30.2	21.9	8.2	28.5	10.7	11.3	9.3	8.3	10.9	95.9	39.7	60.8	35.2	68.7
1937	57.7	29.7	22.0	7.8	28.0	10.8	11.2	9.4	8.3	10.3	94.4	39.0	60.2	34.2	67.6
1938	52.8	28.3	21.1	7.1	24.5	10.3	10.8	8.2	7.3	9.0	88.9	38.3	58.6	30.4	65.5
1939	50.6	28.3	21.2	7.1	22.2	10.3	10.9	7.9	7.0	7.3	86.9	38.1	58.5	28.4	65.3
1940	56.8	29.6	21.3	8.3	27.2	9.8	11.5	9.3	8.2	9.7	92.5	37.2	57.7	34.7	65.7
1941	60.0	29.0	20.7	8.3	31.1	10.1	10.6	11.3	9.7	10.1	92.4	34.8	54.7	37.7	62.7
1942	50.6	27.2	19.6	7.7	23.4	9.6	10.0	8.7	7.5	7.2	81.1	33.2	52.1	29.0	59.4
1943	49.1	25.2	18.3	6.9	23.9	9.1	9.2	8.8	7.8	7.3	77.5	30.1	47.9	29.6	54.6
1944	45.4	24.4	17.5	6.9	21.1	8.8	8.8	8.0	7.0	6.1	70.9	27.6	44.5	26.3	51.1
1945	46.0	24.8	18.0	6.8	21.3	9.0	9.0	8.2	7.0	6.1	73.4	27.6	45.2	28.1	51.8

1946	42.9	24.5	17.8	6.7	18.4	8.7	9.1	7.1	6.1	5.2	66.9	27.2	44.3	22.6	50.7
1947	41.4	22.7	16.5	6.2	18.6	7.8	8.7	6.9	6.0	5.7	65.0	24.1	40.3	24.6	46.4
1948	33.9	16.7	15.6	4.1	14.2	7.8	7.9	5.5	4.8	3.9	56.8	23.2	38.5	18.4	42.5
1949	32.4	10.3	15.6	3.7	13.0	7.6	8.0	4.8	4.4	3.8	54.6	22.7	38.0	16.7	41.5
1950	29.6	18.5	15.2	3.3	11.1	7.2	8.0	4.3	3.7	3.1	51.7	22.6	37.4	14.3	40.7
1951	29.7	18.8	15.5	3.3	10.9	7.5	8.0	4.1	3.6	3.2	52.2	23.0	38.2	14.0	41.5
1952	27.6	18.3	15.2	3.2	9.3	7.6	7.6	3.7	3.0	2.6	49.6	22.7	37.5	12.1	40.6
1953	26.8	17.7	14.8	2.9	9.1	7.4	7.4	3.4	3.0	2.7	48.6	22.4	36.9	11.7	39.7
1954	25.4	17.7	14.9	2.8	7.7	7.6	7.4	3.0	2.6	2.1	48.4	23.5	38.1	10.3	40.8
1955	24.9	17.3	14.6	2.6	7.6	7.6	7.0	2.9	2.6	2.1	47.5	23.2	37.4	10.0	40.0
1956	23.7	16.8	14.2	2.6	6.9	7.4	6.8	2.7	2.3	1.8	46.0	22.9	36.7	9.2	39.3
1957	23.1	16.5	14.1	2.4	6.7	7.6	6.5	2.6	2.1	1.9	45.1	22.5	36.2	8.8	38.5

\* Rates based on related live births from 1926 to 1956.

† The births upon which these rates are based for successive calendar years are numbers registered up to 1938 inclusive, and numbers of occurrences from 1939.

Table XLV. Stillbirths per 1,000 total births, and deaths in the early neonatal, late neonatal, and post-neonatal periods per 1,000 live births\*, distinguishing illegitimacy, 1936-39, 1940-44, and 1945 to 1957, England and Wales

		1936 to 1939	1940 to 1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
All infants	Stillbirths (Late foetal deaths at or over 28 weeks)	38·8 100	32·3 83	27·6 71	27·2 70	24·1 62	23·2 60	22·7 59	22·6 58	23·0 59	22·7 59	22·4 58	23·5 61	23·2 60	22·9 59	22·5 58
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All infants	Early neonatal deaths (Under 1 week)	21·6 100	19·3 89	18·0 83	17·8 82	16·5 76	15·6 72	15·6 72	15·2 70	15·5 72	15·2 70	14·8 69	14·9 69	14·6 68	14·2 66	14·1 65
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All infants	Late neonatal deaths (1 week and under 4 weeks)	7·6 100	7·5 99	6·8 89	6·7 88	6·2 82	4·1 54	3·7 49	3·3 43	3·3 43	3·2 42	2·9 38	2·8 37	2·6 34	2·6 34	2·4 32
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All infants	Post-neonatal deaths (4 weeks and under 1 year)	25·8 100	25·1 97	21·3 83	18·4 71	18·6 72	14·2 55	13·0 50	11·1 43	10·9 42	9·3 36	9·2 36	7·7 30	7·6 29	6·9 27	6·7 26
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Illegitimate infants	Stillbirths (late foetal deaths at or over 28 weeks)	49·6 100	39·9 80	31·5 64	33·2 67	30·6 62	31·6 64	29·5 59	29·1 59	31·6 64	29·7 60	29·8 60	29·2 59	28·8 58	29·0 58	28·7 58
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Illegitimate infants	Early neonatal (under 1 week)	34·4 100	28·1 82	24·3 71	23·7 69	23·5 68	22·0 64	24·9 72	21·4 62	21·4 62	21·3 62	19·3 56	20·2 59	20·8 60	18·9 55	19·8 58
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Illegitimate infants	Late neonatal (1 week and under 4 weeks)	10·9 100	10·7 98	10·0 92	9·6 88	9·9 91	5·5 50	4·8 44	4·5 41	4·3 39	3·9 36	3·2 29	3·5 32	3·1 28	2·7 25	2·9 27
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Illegitimate infants	Post-neonatal (4 weeks and under 1 year)	41·6 100	35·8 86	30·5 73	26·9 65	24·7 59	17·9 43	15·1 36	13·6 33	12·8 31	9·8 24	10·6 25	8·3 20	7·8 19	7·1 17	7·3 18
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\* Rates prior to 1957 per 1,000 related live births.



Congenital malformations apart, there has been a small fall in the remaining causes classified as mainly of prenatal and natal origin compared with 1956. The rate in 1957 was 11·90 infant deaths per thousand live births compared with 12·05 in 1956. Immaturity, whether mentioned alone or in association with some other condition, was responsible for more than one-third (38 per cent) of all infant mortality, and just over one-half (53 per cent) of neonatal mortality, the proportion of cases in which it was stated to be primary to another disease or mentioned alone, being about one-half the total cases with mention of immaturity. This is now the largest single group of causes of infant mortality and it seems probable that it is here that any further appreciable fall in mortality must be looked for.

Postnatal causes have fallen from 5·85 to 5·43 deaths per thousand live births, and of these pneumonia and bronchitis form nearly two-thirds (63 per cent), mortality here having fallen from 3·76 in 1956 to 3·41 in 1957.

Tables XLVI, XLVII, and XLVIII (pages 80–84) present an analysis of infant mortality in 1957 by aetiological groups and causes of death at various age periods in infancy, Table XLVI dealing with numbers and proportions of deaths in cause groups and age periods. Table XLVII gives separately for male and female infants the rates per thousand live births while Table XLVIII, which also includes stillbirths, shows the annual and quarterly rates and the quarterly rates as a percentage of the annual rates.

Tables XLIX–LI (pages 85–88) are concerned with regional differences in infant mortality in 1957, and Table LII (page 90) with the trend of stillbirth, neonatal and post-neonatal rates in the standard regions over the last five years.

Tables XLIX and L show that both infant mortality and stillbirths are highest in South East Wales and the Northern region and lowest in the South of England regions. The lowest infant mortality rate was recorded in the Eastern region and the lowest stillbirth rate and perinatal rate in the Southern region. Except in the Northern region there was comparatively little difference between the rates within and without the conurbations. The infant mortality within the Tyneside conurbation was appreciably lower than that in the rest of the region, the difference being proportionately the same in the neonatal and post-neonatal period.

The infant mortality in rural areas of England and Wales as a whole is lower than that in any type of urban area (Table L) but the rural mortality in the South of England is slightly higher than that for the whole of the South of England. This is due to the low infant mortality in Greater London which is lower than any urban or rural aggregate within the regional group. The infant mortality in regional groups is shown by the principal cause groups in Table LI. In general the mortality from individual causes varies among the regional groups, as does the mortality from all causes, which is high in the North of England and in Wales and low in the Midlands and Eastern, and South of England, but the mortality from postnatal asphyxia and atelectasis, which accounts for more than one-fifth of all neonatal mortality, is practically the same in the North as in the South of England, and slightly lower than in the Midlands and Eastern, while the mortality from birth injuries in the Midlands and Eastern is the highest recorded.

Table XLVI. Principal causes of death under 1 year, arranged in aetiological groups: (a) Age-group distribution per cent of all deaths assigned to each cause; (b) Cause distribution per 1,000 total deaths in each age-group, 1957, England and Wales

Aetiological group	Cause of death (and International Classification Numbers)	Number of infant deaths (under 1 year)	Age distribution per cent of total infant deaths assigned to each cause				Cause distribution per 1,000 total infant deaths in each age-group				
			Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)	Infant mortality (under 1 year)	Neonatal mortality			
			Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)			Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)	
	All causes	16,720	100	71	61	10	29	1,000	1,000	1,000	1,000
	Congenital malformations (750-759)	3,348	100	61	39	22	39	200	172	129	425
	Total causes mainly of prenatal and natal origin other than congenital malformations	8,608	100	99	95	4	1	515	715	800	217
Prenatal and natal group (including congenital malformations)	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3,108	100	99	95	4	1	186	259	289	80
	Attributed to maternal toxæmia (769)	114	100	100	96	4	—	7	10	11	3
	Ill-defined diseases of early infancy (773)	153	100	93	81	12	7	9	12	12	11
	Postnatal asphyxia and atelectasis (762)	2,809	100	99	96	3	1	168	234	266	51
	Intracranial and spinal injury at birth (760)	1,455	100	98	93	5	2	87	120	133	42
	Other birth injury (including maternal antepartum hæmorrhage) (761)	414	100	99	97	2	1	25	34	39	5
	Erythroblastosis (770)	371	100	98	91	7	2	22	31	33	16
	Hæmorrhagic disease of newborn (771)	184	100	98	90	8	2	11	15	16	9

Postnatal group	Total causes mainly of postnatal origin ...	3,930	100	27	13	13	73	235	88	52	303	598
Postnatal group	Gastro-enteritis (including diarrhoea of newborn) (571, 764) ...	318	100	11	0	11	89	19	3	0	20	59
	Pneumonia and bronchitis (490-493, 763, 500-502)	2,469	100	30	16	14	70	148	62	39	197	359
	Causes classified as infective (001-138) and others mainly infective in origin*	629	100	26	7	19	74	38	14	4	69	97
	Whooping cough, measles (056, 085) ...	88	100	2	—	2	98	5	0	—	1	18
	Acute upper respiratory infections and influenza (470-475, 480-483) ...	102	100	10	6	4	90	6	1	1	2	19
	Otitis media and mastoiditis, empyema, pleurisy (391-393, 518, 519)	49	100	12	2	10	88	3	1	0	3	9
	Septicaemia, skin and subcutaneous tissue infections, sepsis of newborn (053, 690-698, 765-768) ...	109	100	71	14	57	29	7	6	1	36	7
	Tuberculosis other than tuberculous meningitis (001-008, 011-019) ...	10	100	20	20	—	80	1	0	0	—	2
	Tuberculous meningitis (010) ...	3	100	—	—	—	100	0	—	—	—	1
	Meningococcal infections and non-meningococcal meningitis (057, 340) ...	221	100	26	8	18	74	13	5	2	23	34
	Causes classified as infective not specified above (remainder 001-138) ...	47	100	15	—	15	85	3	1	—	4	8
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925) ...	362	100	10	3	7	90	22	3	1	15	67
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985) ...	90	100	76	76	—	24	5	6	7	—	5
	Other accidental causes (remainder E800-E999) ..	62	100	10	6	3	90	4	1	0	1	12
	Total causes remaining ..	834	100	35	24	12	65	50	25	19	56	113
Unclassified	Neoplasms (140-239) ..	90	100	23	19	4	77	5	2	2	2	14
	Other remaining causes ..	744	100	36	24	12	64	44	23	18	53	98

\* I.S.C. Nos. 340, 391-393, 470-483, 518, 519, 690-698, 765-768.



Table XLVII. Principal causes of death under 1 year and in the neonatal, post-neonatal and other age periods, by sex, per 1,000 live births, 1957, England and Wales

Aetiological group	Cause of death (and International Classification Numbers)	Total infant mortality (under 1 year)	Infant mortality per 1,000 live births at various ages								
			Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period		
							Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year
	All causes	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	18.68 14.10	16.17 11.84	2.51 2.26	7.08 6.21	8.54 6.62	7.62 5.22	2.87 2.36	2.23 2.03	1.98 1.81
	Congenital malformations (750-759)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	2.96 2.70	1.93 1.70	1.03 1.00	1.76 1.83	0.76 0.76	1.17 0.94	0.83 0.82	0.51 0.54	0.42 0.47
	Total causes mainly of prenatal and natal origin other than congenital malformations	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	13.62 9.80	13.10 9.30	0.52 0.50	0.14 0.13	7.46 5.57	5.64 3.72	0.10 0.07	0.02 0.04	0.01 0.01
	Immaturity alone, or primary to diseases other than of early infancy (774-776)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	4.82 3.67	4.66 3.44	0.16 0.23	0.04 0.03	2.99 2.23	1.66 1.21	0.04 0.03	— 0.01	— —
	Attributed to maternal toxæmia (769)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	0.16 0.15	0.15 0.15	0.01 0.00	— —	0.09 0.07	0.06 0.08	— —	— —	— —
	Ill-defined diseases of early infancy (773)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	0.22 0.18	0.19 0.15	0.03 0.03	0.01 0.01	0.11 0.09	0.08 0.07	0.01 0.01	0.00 0.01	0.00 0.00
	Postnatal asphyxia and atelectasis (762)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	4.53 3.14	4.40 3.03	0.13 0.11	0.02 0.03	2.44 1.76	1.96 1.27	0.01 0.02	0.00 0.01	0.00 —
	Intracranial and spinal injury at birth (760)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	2.38 1.54	2.28 1.45	0.10 0.09	0.03 0.04	1.07 0.72	1.21 0.73	0.03 0.01	0.00 0.01	0.01 0.01
	Other birth injury (including maternal antepartum hæmorrhage) (761)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	0.68 0.45	0.66 0.44	0.02 0.01	0.00 0.00	0.46 0.33	0.20 0.11	— 0.01	0.00 —	0.00 —
	Erythroblastosis (770)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	0.53 0.49	0.48 0.46	0.04 0.03	0.01 0.00	0.27 0.34	0.21 0.11	0.01 0.00	0.01 —	— —
	Hæmorrhagic disease of newborn (771)	$\begin{Bmatrix} M \\ F \end{Bmatrix}$	0.31 0.18	0.29 0.17	0.02 0.01	0.01 —	0.03 0.03	0.25 0.14	0.00 —	0.01 —	— —
Prenatal and natal group (including congenital malformations)											

Postnatal group	Total causes mainly of postnatal origin	.. .. {M F}	6-01 4-83	1-60 1-29	0-82 0-63	0-78 0-66	4-41 3-54	0-16 0-18	0-66 0-44	1-65 1-27	1-45 1-21	1-31 1-05
Postnatal group	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	.. .. {M F}	0-51 0-36	0-06 0-04	— 0-00	0-06 0-04	0-45 0-32	— —	— —	0-18 0-13	0-13 0-10	0-15 0-10
	Pneumonia and bronchitis (490-493, 763, 500-502)	.. .. {M F}	3-80 3-00	1-18 0-86	0-66 0-44	0-52 0-42	2-62 2-14	0-07 0-06	0-59 0-38	1-03 0-81	0-88 0-74	0-71 0-60
	Causes classified as infective (001-138) and others mainly infective in origin*	.. .. {M F}	0-93 0-80	0-22 0-23	0-06 0-05	0-16 0-18	0-71 0-57	— 0-01	0-06 0-05	0-22 0-14	0-20 0-20	0-29 0-23
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	.. .. {M F}	0-57 0-43	0-05 0-05	0-02 0-01	0-03 0-04	0-52 0-38	0-01 0-00	0-01 0-01	0-19 0-16	0-22 0-15	0-10 0-07
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	.. .. {M F}	0-12 0-13	0-08 0-11	0-08 0-11	— —	0-04 0-02	0-08 0-11	0-00 0-00	0-01 0-01	0-01 0-01	0-02 0-01
	Other accidental causes (remainder E800-E999)	.. .. {M F}	0-08 0-10	0-01 0-01	0-00 0-01	0-01 0-00	0-07 0-09	0-00 0-01	— 0-00	0-02 0-02	0-02 0-01	0-03 0-05
	Total causes remaining	.. .. {M F}	1-28 1-02	0-50 0-30	0-32 0-22	0-18 0-08	0-78 0-72	0-16 0-11	0-15 0-12	0-29 0-20	0-25 0-24	0-24 0-27
	Unclassified											
	Immaturity, or with mention of immaturity (774, 776, 760-5-773-5)	.. ..	8-68	8-63	8-13	0-50	0-05	4-69	3-44	0-05	0-00	0-00
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)		4-30	4-26	4-07	0-19	0-04	2-62	1-44	0-03	0-00	—
	Immaturity associated with diseases of early infancy (760-5-773-5)	.. ..	4-39	4-37	4-06	0-31	0-02	2-06	2-00	0-01	—	0-00
	All other causes (760-0-773-0 and remainder)	.. ..	14-43	7-82	5-94	1-88	6-61	2-92	3-02	2-58	2-13	1-89

\* I.S.C. Nos. 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table XLVIII. Stillbirths per 1,000 total births, infant deaths, and deaths in the early neonatal, late neonatal, and post-neonatal periods, and deaths from the principal causes of infant mortality per 1,000 live births; comparison of annual and quarterly rates, 1957, England and Wales

Aetiological group	Cause of death (and International Classification Numbers)	Annual rate	Quarterly rates				Quarterly rates per cent of annual rates				
			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Jan. to March	April to June	July to Sept.	Oct. to Dec.	
Stillbirths (late foetal deaths at or over 28 weeks' gestation)	.. .. .	22.45	23.05	22.12	22.09	22.56	103	99	98	100	
	Early neonatal deaths (infant deaths at ages under 1 week)	14.07	13.93	13.78	14.00	14.60	99	98	100	104	
	Late neonatal deaths (infant deaths at ages 1 week and under 4 weeks)	2.39	2.72	2.13	2.21	2.50	114	89	92	105	
	Post-neonatal deaths (infant deaths at ages 4 weeks and under 1 year)	6.66	7.92	5.72	5.42	7.62	119	86	81	114	
Infant deaths (total under 1 year)	.. .. .	23.11	24.57	21.63	21.62	24.72	106	94	94	107	
	Congenital malformations (750-759)	4.63	4.75	4.66	4.39	4.71	103	101	95	102	
	Total causes mainly of prenatal and natal origin other than congenital malformations	11.90	11.73	11.73	11.71	12.45	99	99	98	105	
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	4.30	3.97	4.26	4.40	4.57	92	99	102	106	
Prenatal and natal group (including congenital malformations)	Attributed to maternal toxæmia (769)	0.16	0.13	0.13	0.20	0.18	81	81	125	112	
	Ill-defined diseases of early infancy (773)	0.21	0.20	0.21	0.19	0.25	95	100	90	119	
	Postnatal asphyxia and atelectasis (762)	3.88	3.77	4.00	3.66	4.09	97	103	94	105	
	Intrauterine and spinal injury at birth (760)	2.01	2.15	1.85	2.07	1.99	107	92	103	99	
	Other birth injury (including maternal antepartum hæmorrhage) (761)	0.57	0.68	0.54	0.50	0.57	119	95	88	100	
	Erythroblastosis (770)	0.51	0.60	0.50	0.51	0.44	118	98	100	86	
	Hæmorrhagic disease of newborn (771)	0.25	0.24	0.24	0.18	0.37	96	96	72	148	
	Total causes mainly of postnatal origin	5.43	6.77	4.51	4.08	6.43	125	83	75	118	
	Postnatal group	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	0.44	0.55	0.44	0.32	0.45	125	100	73	102
		Pneumonia and bronchitis (490-493, 763; 500-502)	3.41	4.58	2.66	2.34	4.10	134	78	69	120
Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768)		0.87	0.93	0.78	0.79	0.98	107	90	91	113	
Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)		0.50	0.52	0.40	0.41	0.68	104	80	82	136	
Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)		0.12	0.13	0.13	0.11	0.12	108	108	92	100	
Other accidental causes (remainder E800-E999)		0.09	0.06	0.10	0.10	0.09	67	111	111	100	
Total causes remaining		1.15	1.33	0.72	1.45	1.13	116	63	126	98	
Unclassified	Total causes remaining	1.15	1.33	0.72	1.45	1.13	116	63	126	98	
	Immaturity, or with mention of immaturity (774, 776, 760.5-773.5)	8.68	8.32	8.56	8.75	9.11	96	99	101	105	
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	4.30	3.97	4.26	4.40	4.57	92	99	102	106	
	Immaturity associated with diseases of early infancy (760.5-773.5)	4.39	4.36	4.30	4.35	4.54	99	98	99	103	
All other causes (760.0-773.0 and remainder)		14.43	16.25	13.07	12.87	15.61	113	91	89	108	



Table XLIX. Infant mortality per 1,000 live births, and combined stillbirth and infant death rates per 1,000 total births, according to age, in standard regions, conurbations, and urban and rural aggregates within regional groups, 1957, England and Wales

Infant mortality per 1,000 live births at various ages															Stillbirths and infant deaths, Rates per 1,000 total births				
Total infant mortality (under 1 year)	Neo-natal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period				Post-neonatal period			Stillbirths (late foetal deaths at 28 weeks gestation)	Stillbirths plus infant deaths at 1 week	Infant deaths at 1 week over 4 weeks	Stillbirths plus infant deaths under 4 weeks				
					Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year										
ENGLAND AND WALES	23.11	16.46	14.07	2.39	6.65	7.61	6.46	2.62	2.14	1.90	45.05	22.45	36.21	8.84	38.54				
NORTH OF ENGLAND																			
Northern ..	26.75	18.57	15.62	2.95	8.18	8.20	7.42	3.50	2.67	2.02	51.69	25.63	40.85	10.84	43.72				
East and West Ridings ..	25.00	17.22	14.66	2.55	7.78	8.25	6.41	2.89	2.70	2.19	47.88	23.46	37.78	10.09	40.28				
North Western ..	25.80	17.53	14.80	2.73	8.27	8.29	6.51	3.31	2.50	2.46	50.84	25.71	40.13	10.71	42.78				
MIDLANDS AND EASTERN																			
North Midland ..	22.92	16.36	13.83	2.53	6.56	7.26	6.57	2.41	2.38	1.76	44.44	22.02	35.55	8.89	38.03				
Midland ..	24.60	17.61	15.13	2.48	6.99	7.86	7.28	2.60	2.09	2.31	47.07	23.04	37.82	9.25	40.24				
Eastern ..	19.78	14.12	12.34	1.78	5.66	6.61	5.73	2.20	1.82	1.64	39.77	20.39	32.47	7.29	34.22				
SOUTH OF ENGLAND																			
London and South Eastern ..	19.88	14.76	12.90	1.86	5.12	7.26	5.64	2.05	1.72	1.35	39.12	19.64	32.29	6.84	34.11				
Southern ..	20.16	14.79	12.74	2.05	5.37	6.95	5.80	1.92	1.60	1.85	39.06	19.29	31.79	7.27	33.79				
South Western ..	20.96	15.68	13.54	2.14	5.28	7.32	6.22	2.08	1.72	1.47	41.93	21.42	34.66	7.26	36.76				
WALES (including Monmouthshire)																			
Wales I (South East)	28.41	20.03	16.40	3.63	8.38	7.83	8.57	3.72	2.43	2.23	53.45	25.78	41.76	11.70	45.29				
Wales II (Remainder)	29.95	21.21	17.16	4.05	8.74	8.29	8.88	3.92	2.48	2.35	55.62	26.46	43.17	12.45	47.11				
Wales ..	24.10	16.73	14.28	2.45	7.37	6.55	7.73	3.18	2.27	1.91	47.40	23.88	37.81	9.59	40.21				
Tyneside conurbation ..																			
Rest of Northern ..	25.01	17.36	14.47	2.89	7.65	7.39	7.07	3.73	2.06	1.86	49.52	25.13	39.24	10.28	42.06				
West Yorkshire conurbation	27.39	19.01	16.05	2.96	8.38	8.49	7.55	3.41	2.89	2.07	52.49	25.81	41.44	11.05	44.33				
Rest of East and West Ridings																			
Rest of East ..	24.57	16.71	14.08	2.63	7.86	7.82	6.26	2.78	2.93	2.15	46.89	22.89	36.65	10.25	39.22				
Rest of West ..	25.29	17.55	15.05	2.50	7.74	8.54	6.51	2.97	2.55	2.21	48.53	23.84	38.54	9.99	40.98				
S.E. Lancashire conurbation																			
Merseyside conurbation	25.91	17.64	14.89	2.76	8.27	8.34	6.54	3.36	2.66	2.26	50.79	25.54	40.05	10.74	42.73				
Rest of North Western ..	25.85	17.45	14.70	2.75	8.40	8.98	5.72	3.69	2.39	2.32	51.24	26.06	40.38	10.86	43.06				
Rest of North ..	25.65	17.47	14.78	2.69	8.18	7.77	7.02	3.00	2.42	2.76	50.62	25.63	40.03	10.59	42.65				
West Midlands conurbation ..																			
Rest of Midland ..	24.46	17.20	14.91	2.29	7.26	8.34	6.57	2.60	2.18	2.47	47.16	23.27	37.84	9.32	40.07				
Rest of South ..	24.75	18.02	15.36	2.67	6.73	7.38	7.98	2.59	1.99	2.15	46.99	22.80	37.81	9.18	40.42				
Greater London conurbation																			
Rest of South Eastern ..	19.86	14.82	12.95	1.87	5.04	7.22	5.74	2.06	1.74	1.25	39.00	19.53	32.23	6.77	34.06				
Rest of South ..	19.92	14.57	12.75	1.82	5.35	7.40	5.35	2.04	1.67	1.64	39.49	19.96	32.46	7.03	34.24				

Table L. Infant mortality per 1,000 live births, and combined stillbirth and infant death rates per 1,000 total births, according to age, in urban and rural aggregates within regional groups, 1957, England and Wales

		Infant mortality per 1,000 live births at various ages						Stillbirths and infant deaths, total births				Rates per 1,000				
		Total infant mortality (under 1 year)	Neo-natal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period		Stillbirths plus infant deaths under 1 year			Stillbirths (late foetal deaths at 28 weeks' gestation)	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
Under 1 day	1 day and under 1 week						4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year							
ENGLAND AND WALES		23·11	16·46	14·07	2·39	6·65	7·61	6·46	2·62	2·14	1·90	45·05	52·45	36·21	8·84	38·54
Conurbations		22·79	16·18	13·90	2·29	6·61	7·79	6·10	2·66	2·14	1·81	44·57	22·29	35·87	8·70	38·11
Other urban areas with populations of 100,000 and over		24·07	17·32	14·72	2·60	6·75	7·70	7·02	2·67	2·19	1·89	46·41	22·89	37·27	9·14	39·81
with populations of 50,000 and under 100,000		24·36	16·55	14·09	2·46	7·81	7·26	6·82	3·09	2·39	2·34	46·47	22·66	36·43	10·05	38·84
with populations under 50,000		23·64	16·76	14·35	2·42	6·88	7·59	6·76	2·63	2·28	1·97	46·42	23·33	37·35	9·07	39·71
Rural districts		22·01	16·01	13·64	2·37	6·00	7·36	6·28	2·34	1·84	1·82	42·93	21·39	34·74	8·19	37·06
NORTH OF ENGLAND																
(Northern, East and West Ridings, North Western)		25·80	17·70	14·96	2·73	8·10	8·26	6·71	3·23	2·60	2·27	50·20	25·04	39·63	10·57	42·29
Conurbations (Tyneside, West Yorkshire, South East Lancashire, Merseyside)		25·44	17·33	14·58	2·74	8·11	8·24	6·34	3·35	2·57	2·19	49·77	24·97	39·18	10·59	41·86
Other urban areas with populations of 100,000 and over		26·28	18·44	15·87	2·57	7·84	8·67	7·20	3·56	2·30	1·99	51·28	25·68	41·13	10·15	43·64
with populations of 50,000 and under 100,000		28·67	17·96	15·11	2·84	10·71	8·25	6·86	3·90	3·51	3·29	53·42	25·49	40·22	13·21	42·99
with populations under 50,000		25·63	17·83	15·26	2·57	7·80	8·12	7·14	2·96	2·68	2·16	50·49	25·52	40·38	10·11	42·89
Rural districts		25·24	17·96	14·94	3·02	7·28	8·12	6·82	2·53	2·34	2·40	48·36	23·72	38·31	10·05	41·26

# MIDLANDS AND EASTERN

(North Midland, Midland, Eastern)	22-65	16-19	13-90	2-29	6-46	7-30	6-60	2-42	2-09	1-94	44-09	21-94	35-54	8-56	37-78
Conurbation (West Midlands)	24-46	17-20	14-91	2-29	7-26	8-34	6-57	2-60	2-18	2-47	47-16	23-27	37-84	9-32	40-07
Other urban areas with populations of 100,000 and over	23-10	16-47	13-77	2-70	6-63	7-06	6-72	2-24	2-33	2-06	43-41	20-79	34-27	9-13	36-92
with populations of 50,000 and under 100,000	23-06	16-25	14-05	2-20	6-81	7-34	6-71	2-78	2-25	1-78	45-23	22-69	36-42	8-81	38-57
with populations under 50,000	22-75	16-32	14-02	2-29	6-43	7-00	7-02	2-35	2-31	1-77	44-70	22-46	36-17	8-53	38-41
Rural districts	20-82	15-14	13-09	2-06	5-68	6-97	6-11	2-34	1-62	1-71	41-31	20-93	33-74	7-57	35-75
SOUTH OF ENGLAND															
(London and South Eastern, Southern, South Western)	20-13	14-94	12-99	1-94	5-19	7-21	5-78	2-03	1-70	1-46	39-63	19-91	32-64	7-00	34-54
Conurbation (Greater London)	19-86	14-82	12-95	1-87	5-04	7-22	5-74	2-06	1-74	1-25	39-00	19-53	32-23	6-77	34-06
Other urban areas with populations of 100,000 and over	21-28	15-91	13-89	2-02	5-37	7-31	6-38	1-68	1-85	1-85	41-35	20-51	34-11	7-24	36-09
with populations of 50,000 and under 100,000	20-39	14-83	12-88	1-95	5-56	6-04	6-84	2-38	1-34	1-83	39-27	19-28	31-91	7-36	33-82
with populations under 50,000	19-97	14-55	12-60	1-94	5-42	7-43	5-17	2-05	1-75	1-63	40-36	20-80	33-14	7-22	35-04
Rural districts	20-32	15-17	13-08	2-10	5-15	7-35	5-73	2-01	1-60	1-53	39-80	19-89	32-71	7-10	34-77
WALES (including Monmouthshire)															
Urban areas with populations of 100,000 and over	28-41	20-03	16-40	3-63	8-38	7-83	8-57	3-72	2-43	2-23	53-45	25-78	41-76	11-70	45-29
Urban area with population of 50,000 and under 100,000	27-11	20-00	16-30	3-70	7-11	7-87	8-44	3-70	2-18	1-23	53-22	26-84	42-71	10-52	46-31
Urban areas with populations under 50,000	37-37	25-25	16-16	9-09	12-12	8-08	8-08	6-06	2-02	4-04	62-93	26-55	42-28	20-65	51-13
Rural districts	30-50	21-01	17-43	3-58	9-49	8-22	9-21	4-03	2-54	2-92	56-36	26-68	43-64	12-72	47-13
	25-64	18-13	14-95	3-17	7-51	7-18	7-77	3-09	2-51	1-92	48-45	23-41	38-01	10-44	41-11



Table LI. Principal causes of death under 1 year : Death rates per 1,000 live births, showing regional group rates as percentages of corresponding national rates, 1957, England and Wales

Aetiological group	Cause of death (and International Classification Numbers)	Infant mortality rates per 1,000 live births					Regional rates per cent of England and Wales rate			
							North of England	Midlands and Eastern	South of England	Wales
		England and Wales	North of England	Midlands and Eastern	South of England	Wales				
	All causes	23·11	25·80	22·65	20·13	28·41	112	98	87	123
Prenatal and natal group (including congenital malformations)	Congenital malformations (750-759) .. .. .	4·63	5·11	4·74	3·93	5·67	110	102	85	122
	Total causes mainly of prenatal and natal origin other than congenital malformations .. .. .	11·90	12·68	11·65	10·97	14·36	107	98	92	121
	Immaturity alone, or primary to disease other than of early infancy (744,776) .. .. .	4·30	5·00	3·93	3·86	4·71	116	91	90	110
	Attributed to maternal toxæmia (769) .. .. .	0·16	0·14	0·20	0·13	0·29	88	125	81	181
	Ill-defined diseases of early infancy (773) .. .. .	0·21	0·26	0·11	0·23	0·31	124	52	110	148
	Postnatal asphyxia and atelectasis (762) .. .. .	3·88	3·79	3·82	3·78	5·33	98	98	97	137
	Intracranial and spinal injury at birth (760) .. .. .	2·01	2·17	2·27	1·71	1·78	108	113	85	89
	Other birth injury (including maternal antepartum hæmorrhage) (761) .. .. .	0·57	0·49	0·54	0·62	0·89	86	95	109	156
	Erythroblastosis (770) .. .. .	0·51	0·56	0·54	0·43	0·62	110	106	84	122
	Hæmorrhagic disease of newborn (771) .. .. .	0·25	0·27	0·25	0·22	0·43	108	100	88	172
	Total causes mainly of postnatal origin .. .. .	5·43	6·73	5·20	4·17	6·96	124	96	77	128
Postnatal group	Gastro-enteritis (including diarrhoea of newborn) (571, 764) .. .. .	0·44	0·63	0·34	0·27	0·86	143	77	61	195
	Pneumonia and bronchitis (490-493, 763, 500-502) .. .. .	3·41	4·24	3·25	2·64	4·27	124	95	77	125
	Causes classified as infective (001-138), and others mainly infective in origin* .. .. .	0·87	0·99	0·95	0·67	1·01	114	109	77	116
	Whooping cough, measles (056, 085) .. .. .	0·12	0·12	0·17	0·09	0·12	100	142	75	100

Postnatal group—(contd.)	Acute upper respiratory infections and influenza (470-475, 480-483) .. .. .	0.14	0.18	0.17	0.09	0.12	129	121	64	86
	Otitis media and mastoiditis, empyema, pleurisy (391-393, 518, 519) .. .. .	0.07	0.06	0.08	0.06	0.10	86	114	86	143
	Septicæmia, skin and subcutaneous tissue infections, sepsis of newborn (053, 690-698, 765-768) .. .. .	0.15	0.17	0.14	0.14	0.17	113	93	93	113
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019) .. .. .	0.01	0.01	0.03	0.00	0.02	100	300	40	200
	Tuberculous meningitis (010) .. .. .	0.00	0.00	0.01	—	—	100	250	—	—
	Meningococcal infections and non-meningococcal meningitis (037, 340) .. .. .	0.31	0.35	0.28	0.26	0.43	113	90	84	139
	Causes classified as infective not specified above (remainder 001-138) .. .. .	0.06	0.09	0.07	0.04	0.05	150	117	67	83
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925) .. .. .	0.50	0.62	0.46	0.39	0.70	124	92	78	140
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985) .. .. .	0.12	0.15	0.13	0.11	0.05	125	108	92	42
	Other accidental causes (remainder E800-E999) .. .. .	0.09	0.09	0.07	0.09	0.07	100	78	100	78
Unclassified	Total causes remaining .. .. .	1.15	1.29	1.06	1.06	1.42	112	92	92	123
	Neoplasms (140-239) .. .. .	0.12	0.12	0.13	0.12	0.12	100	108	100	100
	Other remaining causes .. .. .	1.03	1.16	0.93	1.93	1.30	113	90	90	126
	Immaturity, or with mention of immaturity (774, 776, 760.5-773.5) .. .. .	8.68	9.26	8.34	8.07	10.76	107	96	93	124
All other causes (760.0-773.0 and remainder) .. .. .	Immaturity alone, or primary to diseases other than of early infancy (774, 776) .. .. .	4.30	5.00	3.93	3.86	4.71	116	91	90	110
	Immaturity associated with diseases of early infancy (760.5, 773.5) .. .. .	4.39	4.26	4.41	4.21	6.05	97	100	96	138
	All other causes (760.0-773.0 and remainder) .. .. .	14.43	16.54	14.31	12.06	17.65	115	99	84	122

\*I.S.C. Nos. 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table LII shows the trend of stillbirth, neonatal and post-neonatal rates over the last five years in the standard regions. Among stillbirths very little change can be detected, but the neonatal rate has fallen more or less steadily in all parts except Wales, where the 1953 rate was lower than in any subsequent year.

**Table LII. Trend of stillbirths per 1,000 total births, and of deaths in the neonatal and post-neonatal periods per 1,000 live births\*, in standard regions, 1953 to 1957, England and Wales**

		Rates in each year 1953 to 1957					Rates in 1954 to 1957 per cent of rate in 1953			
		1953	1954	1955	1956	1957	1954	1955	1956	1957
Stillbirths (at or over 28 weeks' gestation) per 1,000 total births	ENGLAND AND WALES	22.4	23.5	23.5	22.9	22.5	105	105	102	100
	NORTH OF ENGLAND	24.2	25.8	25.3	24.7	25.0	107	105	102	103
	Northern .. .. .	23.3	24.8	24.7	24.8	25.6	106	106	106	110
	East and West Ridings ..	23.6	25.0	24.8	22.7	23.5	106	105	96	100
	North Western .. ..	25.0	26.8	26.0	25.8	25.7	107	104	103	103
	MIDLANDS AND EASTERN .. .. .	22.2	23.6	23.3	23.2	21.9	106	105	105	99
	North Midland .. ..	22.9	24.1	24.3	24.8	22.0	105	106	108	96
	Midland .. .. .	23.3	24.4	24.5	24.1	23.0	105	105	103	99
	Eastern .. .. .	20.0	21.8	20.7	20.4	20.4	109	104	102	102
	SOUTH OF ENGLAND	20.4	20.7	20.2	20.4	19.9	101	99	100	98
	London and South Eastern	20.2	20.1	19.5	19.3	19.6	100	97	96	97
	Southern .. .. .	21.0	20.5	20.5	20.9	19.3	98	98	100	92
	South Western .. ..	20.4	23.0	22.2	23.3	21.4	113	109	114	105
	WALES (including Monmouthshire) ..	25.3	27.3	28.3	26.8	25.8	108	112	106	102
Neonatal mortality per 1,000 live births	ENGLAND AND WALES	17.7	17.7	17.3	16.8	16.5	100	98	95	93
	NORTH OF ENGLAND	19.7	19.6	19.2	18.7	17.7	99	97	95	90
	Northern .. .. .	19.3	20.4	21.3	18.9	18.6	106	110	98	96
	East and West Ridings ..	19.8	18.1	17.3	18.5	17.2	91	87	93	87
	North Western .. ..	19.9	20.2	19.2	18.6	17.5	102	96	93	88
	MIDLANDS AND EAST- ERN .. .. .	17.7	17.9	16.7	16.6	16.2	101	94	94	92
	North Midland .. ..	18.0	18.0	17.0	16.9	16.4	100	94	94	91
	Midland .. .. .	18.9	19.4	18.0	17.6	17.6	103	95	93	93
	Eastern .. .. .	15.7	15.5	14.6	14.8	14.1	99	93	94	90
	SOUTH OF ENGLAND	15.4	15.3	15.4	14.8	14.9	99	100	96	97
	London and South Eastern	15.0	14.8	15.2	14.6	14.8	99	101	97	99
	Southern .. .. .	15.4	16.2	15.8	15.0	14.8	105	103	97	96
	South Western .. ..	16.5	16.3	15.5	15.0	15.7	99	94	91	95
	WALES (including Monmouthshire) ..	19.7	21.5	20.8	20.6	20.0	109	106	105	102
Post-neonatal mortality per 1,000 live births	ENGLAND AND WALES	9.1	7.7	7.6	6.9	6.7	85	84	76	74
	NORTH OF ENGLAND	10.6	9.2	9.0	8.2	8.1	87	85	77	76
	Northern .. .. .	11.6	9.2	9.9	8.2	8.2	79	85	71	71
	East and West Ridings ..	10.7	9.7	8.9	7.7	7.8	91	83	72	73
	North Western .. ..	10.0	9.0	8.7	8.4	8.3	90	87	84	83
	MIDLANDS AND EAST- ERN .. .. .	8.8	7.4	7.7	6.8	6.5	84	87	77	74
	North Midland .. ..	9.8	8.0	8.7	7.4	6.6	82	89	76	67
	Midland .. .. .	8.9	7.9	8.1	7.2	7.0	89	91	81	79
	Eastern .. .. .	7.6	6.2	6.0	5.8	5.7	82	79	76	75
	SOUTH OF ENGLAND	7.7	6.1	5.9	5.6	5.2	79	77	73	68
	London and South Eastern	7.6	5.5	6.0	5.7	5.1	72	79	75	67
	Southern .. .. .	8.0	7.0	5.8	5.6	5.4	88	72	70	68
	South Western .. ..	8.1	7.2	5.7	5.2	5.3	89	70	64	65
	WALES (including Monmouthshire) ..	11.6	10.0	10.6	8.2	8.4	86	91	71	72

\* Rates prior to 1957 per 1,000 related live births.



Post-neonatal mortality has steadily declined in all parts of the country, the greatest falls being recorded in the North Midland region and South of England regional group, where the present rates amount to about a third of the 1953 mortality rate. The post-neonatal rate in Wales has fallen by 28 per cent, which is similar to that for England and Wales as a whole. The decline in mortality in the previous five years (1948-52) was greater (35 per cent) for England and Wales, but in the South of England and Wales it has remained about the same, and in the North, and Midlands and Eastern the rate of fall has diminished.

	Percentage fall of post-neonatal mortality	
	1948 to 1952	1953 to 1957
North of England ..	40	24
Midlands and Eastern ..	32	26
South of England ..	31	32
Wales .. ..	26	28

## TUBERCULOSIS

There were 4,784 deaths assigned to tuberculosis in 1957 compared with 5,375 in 1956, a fall of 591 or 11 per cent. Male deaths numbered 3,414 and female 1,370 compared with 3,804 and 1,571 respectively in 1956. Thus the reduction in the female deaths (13 per cent) was slightly greater than in the males (10 per cent).

The table below gives details of the death rates from all forms of tuberculosis in four main age-groups in 1956 and 1957, together with the percentage decline since 1956.

Age at death	Males			Females		
	Death rate per million living		Percentage fall in death rate	Death rate per million living		Percentage fall in death rate
	1956	1957		1956	1957	
0- .. ..	10	9	10	7	10	-43
15- .. ..	76	62	18	70	61	13
45- .. ..	343	300	13	79	64	19
65 and over	608	576	5	137	121	12
All ages ..	177	158	11	68	59	13

The rise in the death rate of female children from tuberculosis is unlikely to be of any significance. There was a fall in the rate for this group between 1955 and 1956 of 59 per cent and in Part III of the 1956 *Review*\* it was stated that with the few deaths involved random fluctuations would become more obvious. The figure for 1957 appears to confirm this statement, for since 1955 there was a 41 per cent fall in the rate: equal to just over 20 per cent for each year. For all the other sex- and age-groups there was a fall in the death rate in 1957 varying from 5 to 19 per cent.

Deaths from respiratory tuberculosis numbered 4,249, representing a fall of 604 (12 per cent) on the number for 1956. On the other hand, for the first time for many years there was a rise in the number of deaths from the non-respiratory form of the disease from 522 in 1956 to 535 in 1957. This represents an increase of 2 per cent, does not reach the level of statistical significance, and may be simply a temporary fluctuation (see page 95).

### Respiratory tuberculosis

The death rates per million from respiratory tuberculosis for 1957 and preceding years are shown by sex and age in Table LIII (page 93). Although one or two of the rates for the younger age-groups remained constant in 1957 when compared with 1956, they were already very low. In all other sex- and age-groups the rate fell in 1957. There were no deaths of boys aged 5-9 nor of girls aged 10-14 assigned to respiratory tuberculosis in 1957.

\* *Registrar General's Statistical Review for 1956, Part III, Commentary*, page 104. H.M.S.O. London, price 16s. 6d. net.

**Table LIII. Tuberculosis of the respiratory system: Death rates per million living by sex and age, 1931-1945, and 1946 to 1957, England and Wales**

	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over
<b>Males</b>											
1931-35 ..	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936-40 ..	61	20	44	366	742	785	937	1,210	1,216	718	296
1941-45 ..	76	24	34	339	581	674	811	1,114	1,203	741	295
1946 ..	68	22	23	239	481	615	687	1,020	1,165	768	340
1947 ..	77	15	29	241	500	632	679	1,034	1,213	812	267
1948 ..	56	10	14	211	445	603	633	961	1,166	881	334
1949 ..	33	6	13	127	368	496	591	869	1,153	927	380
1949* ..	34	7	14	127	366	497	592	869	1,159	937	400
1950* ..	38	9	8	78	229	395	428	751	1,024	891	411
1951* ..	30	7	7	46	171	292	364	636	978	953	464
1952* ..	15	4	10	35	102	201	287	503	829	843	447
1953* ..	14	4	3	18	71	156	214	413	712	814	445
1954* ..	9	2	1	13	55	130	192	370	643	778	406
1955* ..	3	1	1	8	30	93	151	307	535	705	420
1956* ..	7	1	2	7	14	71	113	231	456	640	463
1957* ..	3	—	2	3	12	40	105	193	410	605	436
<b>Females</b>											
1931-35 ..	74	43	143	840	1,138	911	646	475	394	306	170
1936-40 ..	55	24	98	658	1,016	759	511	377	339	272	160
1941-45 ..	72	24	76	591	916	692	427	304	269	220	123
1946 ..	60	25	69	468	842	662	382	261	242	207	119
1947 ..	70	24	63	502	899	730	411	267	249	224	133
1948 ..	52	19	53	462	812	702	367	255	235	218	105
1949 ..	33	9	30	349	684	622	348	253	245	229	127
1949* ..	33	10	30	351	682	622	348	254	249	236	139
1950* ..	29	8	15	199	429	444	273	229	212	212	144
1951* ..	25	8	14	108	278	347	238	192	180	198	135
1952* ..	18	5	6	58	169	230	166	131	148	150	159
1953* ..	17	5	3	32	122	174	146	116	130	162	140
1954* ..	11	2	3	31	84	143	145	104	107	137	117
1955* ..	6	2	4	12	56	113	101	84	95	111	115
1956* ..	4	1	—	6	35	80	79	62	70	111	125
1957* ..	4	1	—	6	12	70	75	53	55	80	91

\* According to the Sixth (1948) Revision of the International List. Throughout the rest of the table rates are according to the Fifth (1938) Revision.

Notification rates for respiratory tuberculosis are shown in Table LIV (page 94). As with the mortality rates, the trend is generally downwards although the rate of decline is somewhat less. It is difficult to separate the increase in notifications in 1940-1950, which was due to increased case finding and availability of diagnostic aids, from the real decline in incidence which is almost certainly taking place, at least in more recent years. This difficulty is still felt among the older ages in both sexes and particularly the males where the notification rate in 1957 was much higher than in 1938. Provided that there has been



no real increase in incidence, this high notification rate among older people is not, in itself, a bad thing, for a case notified is a case known and therefore less likely to transmit infection and more easily treated. As the relatively tuberculosis-free cohorts become older it is to be anticipated that the notification rate will begin to fall in the older age-groups.

**Table LIV. Tuberculosis of the respiratory system : Notification rates per 100,000 living, by sex and age, 1938 to 1957, England and Wales**

	All ages	0-	5-	15-	25-	35-	45-	65 and over
<b>Males</b>								
1938 .. ..	108	20	42	141	137	136	136	52
1939 .. ..	98	17	32	132	124	124	125	46
1940 .. ..	104	17	29	145	146	128	123	43
1941 .. ..	115	20	33	154	155	148	141	50
1942 .. ..	117	22	38	165	148	153	142	49
1943 .. ..	119	27	40	166	144	154	152	50
1944 .. ..	122	30	41	180	158	142	149	56
1945 .. ..	118	32	40	178	160	135	142	53
1946 .. ..	119	32	46	179	174	125	138	54
1947 .. ..	118	40	53	193	163	116	137	56
1948 .. ..	117	44	51	215	161	117	139	64
1949 .. ..	119	46	49	180	159	122	146	68
1950 .. ..	111	53	49	159	154	107	135	67
1951 .. ..	115	53	48	170	156	117	141	72
1952 .. ..	112	52	51	165	147	116	135	77
1953 .. ..	110	49	49	155	133	114	139	85
1954 .. ..	100	41	40	143	125	106	126	82
1955 .. ..	92	36	34	125	110	96	121	81
1956* .. ..	88	29	28	115	101	92	121	87
1957* .. ..	82	26	23	99	97	90	114	87
<b>Females</b>								
1938 .. ..	77	18	42	175	129	72	42	19
1939 .. ..	71	15	33	166	116	68	37	18
1940 .. ..	70	17	30	168	120	66	35	16
1941 .. ..	76	19	33	185	126	69	41	19
1942 .. ..	78	20	34	204	130	70	37	18
1943 .. ..	83	26	40	209	142	73	40	18
1944 .. ..	86	26	40	227	150	75	38	16
1945 .. ..	81	26	41	223	140	69	34	16
1946 .. ..	80	28	49	213	141	65	35	16
1947 .. ..	83	33	51	235	146	66	35	17
1948 .. ..	86	46	58	244	151	68	35	17
1949 .. ..	85	44	53	238	155	71	35	17
1950 .. ..	82	43	52	238	152	69	31	16
1951 .. ..	81	50	52	229	149	68	33	16
1952 .. ..	80	49	53	216	148	71	35	16
1953 .. ..	77	45	52	201	141	73	34	18
1954 .. ..	68	37	44	187	124	63	30	17
1955 .. ..	60	35	38	156	112	59	30	17
1956* .. ..	55	30	31	139	101	57	29	18
1957* .. ..	49	30	27	116	90	55	29	17

\* Notifications of respiratory tuberculosis used in this and subsequent tables for 1956 and 1957 are those returned to the General Register Office, and not, as in previous years, those returned to the Ministry of Health. There is a small but insignificant difference between the figures from the two sources. Cases of unstated age are omitted for these two years.

## Non-respiratory tuberculosis

The rise in the number of deaths from non-respiratory tuberculosis was mentioned earlier. The breakdown of this group into individual causes with the number of deaths in each year is shown in the table below:

I.S.C. No.	Cause of death	Number of deaths					
		Males		Females		Persons	
		1956	1957	1956	1957	1956	1957
010	Tuberculosis of: Meninges and central nervous system .. .. .	39	47	52	63	91	110
011	Intestines, peritoneum, and mesenteric glands .. .. .	35	28	35	27	70	55
012	Bones and joints .. .. .	48	42	36	49	84	91
012·0	Vertebral column .. .. .	37	33	28	39	65	72
012·1-3	Other .. .. .	11	9	8	10	19	19
013	Late effects, bones and joints .. .. .	4	2	5	3	9	5
014	Skin and subcutaneous cellular tissue .. .. .	—	2	4	2	4	4
015	Lymphatic system .. .. .	9	5	6	13	15	18
016	Genito-urinary system .. .. .	82	81	64	44	146	125
017	Adrenal glands .. .. .	11	9	5	9	16	18
018	Other organs .. .. .	6	10	6	13	12	23
019	Disseminated .. .. .	36	38	39	48	75	86
	<b>Total .. .. .</b>	<b>270</b>	<b>264</b>	<b>252</b>	<b>271</b>	<b>522</b>	<b>535</b>

From this table it will be seen that the only causes in which there was a rise in both sexes were tuberculosis of the meninges and central nervous system, disseminated tuberculosis, and tuberculosis of "other organs". This last group includes disease of the eye, ear, pericardium, stomach, etc., and is so heterogeneous as to make further analysis impracticable. As far as tuberculosis of meninges and central nervous system and disseminated tuberculosis are concerned, they are aetiologically rather closely related in that it is often generalised tuberculosis which gives rise to the meningeal form. The age distribution of these two forms of the disease in 1956 and 1957 is shown below:

Age				Number of deaths			
				Tuberculosis of meninges and central nervous system		Disseminated tuberculosis	
				1956	1957	1956	1957
0—	..	..	..	30	34	6	12
5—	..	..	..	19	23	2	5
15—	..	..	..	24	29	23	19
45—	..	..	..	14	18	19	21
65 and over	..	..	..	4	6	25	29
<b>All ages</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>91</b>	<b>110</b>	<b>75</b>	<b>86</b>

**Table LV. Tuberculosis : Comparative mortality indices for various sites,  
1931 to 1957, England and Wales**

		All forms		Respiratory system		Meninges and C.N.S.		Intestines, peritoneum, etc.		Bones and joints		Other forms	
		M	F	M	F	M	F	M	F	M	F	M	F
1931	..	1.39	1.47	1.38	1.47	1.44	1.39	1.75	1.91	1.53	1.72	1.24	1.23
1932	..	1.30	1.38	1.27	1.36	1.38	1.28	1.78	1.65	1.45	1.88	1.28	1.34
1933	..	1.29	1.34	1.29	1.35	1.21	1.18	1.50	1.72	1.46	1.52	1.19	1.10
1934	..	1.20	1.24	1.19	1.24	1.22	1.22	1.34	1.45	1.41	1.56	1.07	1.12
1935	..	1.13	1.16	1.13	1.18	1.10	1.01	1.23	1.31	1.29	1.39	0.97	0.98
1936	..	1.09	1.10	1.09	1.11	1.06	1.00	1.08	1.23	1.21	1.33	1.02	0.95
1937	..	1.08	1.12	1.08	1.12	1.04	1.02	1.19	1.09	1.12	1.24	1.04	1.12
1938	..	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1939	..	1.01	0.99	1.02	1.00	0.92	0.93	0.96	0.92	1.05	1.14	0.98	0.93
1940	..	1.18	1.08	1.22	1.09	1.06	1.07	1.09	1.05	1.10	0.99	0.92	1.05
1941	..	1.28	1.11	1.36	1.09	1.42	1.37	1.27	1.00	1.03	1.11	1.32	1.12
1942	..	1.19	0.99	1.27	0.97	1.20	1.13	1.27	1.08	1.30	1.06	1.13	0.99
1943	..	1.26	0.98	1.33	0.96	1.13	1.14	1.02	0.96	1.22	0.99	1.14	0.98
1944	..	1.21	0.92	1.27	0.91	1.05	1.02	0.97	0.81	1.05	0.94	1.11	1.00
1945	..	1.17	0.92	1.23	0.91	1.01	1.04	0.93	0.71	1.01	0.81	1.08	0.92
1946	..	0.94	0.86	0.97	0.86	0.88	0.89	0.69	0.53	0.69	0.80	0.81	0.86
1947	..	0.90	0.89	0.93	0.92	0.81	0.81	0.56	0.62	0.58	0.66	0.83	0.86
1948	..	0.83	0.82	0.87	0.85	0.64	0.70	0.45	0.51	0.54	0.65	0.70	0.68
1949	..	0.76	0.72	0.80	0.77	0.55	0.56	0.39	0.37	0.39	0.48	0.64	0.49
1950	..	0.62	0.55	0.66	0.58	0.42	0.48	0.23	0.25	0.38	0.39	0.47	0.44
1951	..	0.55	0.45	0.58	0.46	0.43	0.46	0.21	0.24	0.29	0.35	0.43	0.39
1952	..	0.44	0.31	0.47	0.32	0.26	0.26	0.17	0.16	0.28	0.26	0.37	0.32
1953	..	0.37	0.26	0.39	0.27	0.18	0.18	0.15	0.14	0.17	0.26	0.31	0.31
1954	..	0.33	0.22	0.36	0.23	0.10	0.10	0.10	0.14	0.19	0.24	0.35	0.29
1955	..	0.27	0.17	0.30	0.18	0.07	0.07	0.11	0.10	0.16	0.16	0.27	0.25
1956	..	0.23	0.14	0.25	0.14	0.04	0.06	0.08	0.08	0.12	0.13	0.21	0.23
1957	..	0.20	0.12	0.22	0.12	0.05	0.07	0.07	0.06	0.10	0.17	0.21	0.23

The increases in deaths assigned to these two causes were not concentrated in any particular age-group, and are so small that they are probably of no importance. The position demands careful watching, however, in case this supposition is wrong and the upward trend is maintained.

The picture given above is summarised in Table LV (above) where the comparative mortality indices (C.M.I.s) are shown for tuberculosis of various sites. The small rise in C.M.I.s for both sexes for tuberculosis of meninges and central nervous system is shown in this table. The magnitude of the increase is also put into its proper perspective.



**Table LVI. Tuberculosis of the meninges and central nervous system, and other non-respiratory tuberculosis : Death rates per million living, by sex and age, 1931-1935, and 1936 to 1957, England and Wales**

	Tuberculosis of meninges and central nervous system						Other non-respiratory tuberculosis					
	0-	5-	10-	15-	25-54 E.A.D.R.	55 and over	0-	5-	10-	15-	25-54 E.A.D.R.	55 and over
Males												
1931-35	414	123	66	49	13	3	219	71	61	105	71	75
1936 ..	313	129	60	42	11	3	152	52	42	92	66	61
1937 ..	319	91	66	42	13	2	168	55	43	79	71	60
1938 ..	297	96	57	42	13	3	156	45	39	87	61	52
1939 ..	284	90	52	38	12	4	125	53	34	89	63	60
1940 ..	300	96	55	48	13	3	146	41	35	89	65	62
1941 ..	402	136	67	55	14	4	188	46	43	91	60	59
1942 ..	321	107	67	53	14	2	134	50	46	84	65	59
1943 ..	288	110	55	50	12	5	134	42	36	73	56	54
1944 ..	273	102	62	51	12	2	109	34	34	67	51	59
1945 ..	266	100	65	47	11	2	107	38	35	67	53	49
1946 ..	222	86	72	42	11	3	87	21	27	51	50	43
1947 ..	215	83	53	39	11	4	92	33	25	46	45	44
1948 ..	179	62	33	30	9	4	57	25	16	41	41	44
1949 ..	153	54	25	26	7	4	34	15	14	38	37	38
1950 ..	103	40	24	20	8	4	24	8	12	25	28	38
1951 ..	109	37	22	19	7	5	17	5	6	19	26	34
1952 ..	67	16	14	13	5	4	19	1	6	14	20	38
1953 ..	46	10	8	10	3	2	12	3	6	7	17	30
1954 ..	22	4	5	4	3	1	13	3	2	11	17	31
1955 ..	14	5	3	3	1	2	8	2	1	9	16	25
1956 ..	10	3	3	2	1	1	4	1	2	3	12	24
1957 ..	6	3	5	3	1	1	6	1	1	4	11	22
Females												
1931-35	356	125	73	48	10	2	160	59	50	84	58	62
1936 ..	283	98	58	47	9	2	129	37	38	66	51	45
1937 ..	291	89	61	50	9	1	132	46	43	72	48	52
1938 ..	300	100	60	40	8	2	112	40	36	73	45	42
1939 ..	252	77	66	47	9	2	102	38	32	69	41	40
1940 ..	278	96	71	61	9	2	118	34	26	80	50	40
1941 ..	370	138	80	70	11	2	141	50	34	83	42	48
1942 ..	290	101	69	64	12	1	92	30	44	79	49	42
1943 ..	277	106	63	72	11	3	101	32	34	74	42	46
1944 ..	234	95	78	58	10	4	86	33	26	67	42	44
1945 ..	246	107	71	60	10	2	84	29	41	55	35	42
1946 ..	199	97	67	52	9	2	64	28	22	53	34	37
1947 ..	184	78	55	52	9	2	65	26	29	57	34	34
1948 ..	166	53	54	44	8	3	56	20	15	39	30	34
1949 ..	126	45	35	33	8	2	33	10	7	26	24	27
1950 ..	116	39	22	31	5	3	20	9	5	22	19	27
1951 ..	102	33	35	30	6	1	15	4	6	14	18	29
1952 ..	57	20	17	16	4	1	10	4	4	9	12	25
1953 ..	48	13	6	9	3	1	16	2	1	9	13	22
1954 ..	18	6	3	8	2	1	4	3	5	7	12	23
1955 ..	17	6	2	2	2	1	11	3	3	3	9	19
1956 ..	9	2	4	5	1	1	2	—	1	3	10	16
1957 ..	14	4	2	3	2	1	4	1	1	4	6	22

Rates have been adjusted to the 1948 method of classification throughout.

Table LVI (above) shows the death rate per million from tuberculosis of the meninges and central nervous system and from other forms of non-respiratory tuberculosis.

The notification rates from non-respiratory tuberculosis are shown in Table LVII (page 98). The rate for males aged 45 and over was the same in 1957 as it was in 1956. For females aged 25-44 there was a slight increase from 118 per million in 1956 to 121 per million in 1957. The notification rates for all other sex- and age-groups fell in 1957 compared with the previous year. As with the mortality figures, it is not thought that these small increases are of any importance, but they require to be watched.

**Table LVII. Non-respiratory tuberculosis: Notification rates per million living, by sex and age, 1938-1945, and 1946 to 1957, England and Wales**

		Males					Females				
		All ages	0-	15-	25-	45 and over	All ages	0-	15-	25-	45 and over
1938-40..	..	290	744	341	151	72	264	641	403	172	61
1941-45..	..	269	698	326	148	64	261	632	413	178	63
1946	..	217	569	250	123	53	210	518	334	149	47
1947	..	202	518	227	114	54	196	455	317	144	51
1948	..	197	505	243	99	53	199	473	333	138	46
1949	..	171	423	211	93	50	174	399	304	127	40
1950	..	151	350	186	93	48	164	343	288	139	39
1951	..	149	327	196	98	48	159	314	300	131	46
1952	..	135	275	196	91	50	146	272	242	135	54
1953	..	122	233	163	85	59	133	224	240	129	51
1954	..	109	192	149	93	48	133	199	245	140	56
1955	..	96	145	154	85	48	109	144	203	126	48
1956	..	87	121	131	83	49	98	113	188	118	49
1957	..	76	91	119	74	49	93	103	162	121	46

### Geographical and urban and rural variations in tuberculosis rates

Table LVIII (page 99) shows standardised mortality ratios (S.M.R.s) and standardised notification ratios (S.N.R.s), calculated in a similar manner, for standard regions, conurbations, and urban and rural aggregates in England and Wales. While regional S.M.R.s are probably a fairly accurate indication of mortality from the disease, notification rates do not necessarily indicate the relative morbidity, as case-finding programmes in local areas may result in increased numbers of notifications without there being any real increase in morbidity.

Considering first the urban and rural aggregates, the male mortality, as revealed by the S.M.R., was above the average in urban areas with populations of 50,000 or more and for females in areas of 100,000 or more. In 1957 the S.M.R. for males in urban areas of between 50,000 and 100,000 population was 121, compared with 97 in 1956, and this relative worsening in their position was the result of an increase in the death rate of males aged 65 and over in these areas, from 496 per million in 1956 to 650 per million in 1957 (see Table LIX, page 101). The number of deaths involved was not large (79 in 1956, 104 in 1957). The death rate for males in all other urban and rural aggregates fell in 1957. There were some changes in the relative position of the S.M.R. for females in 1957 in these aggregates but in all cases the crude death rate fell. S.N.R.s remained approximately the same with high ratios in conurbations and low ones in rural areas.

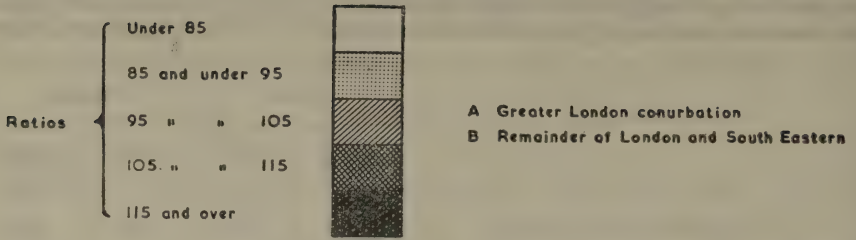
**Table LVIII. Tuberculosis of the respiratory system: Standardised mortality ratios and standardised notification ratios\*, by sex, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1957, England and Wales**

	Males		Females	
	S.M.R.	S.N.R.	S.M.R.	S.N.R.
<b>ENGLAND AND WALES</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Regions and conurbations :</b>				
<b>Northern</b> .. .. .	<b>118</b>	<b>108</b>	<b>138</b>	<b>118</b>
Tyneside conurbation .. .. .	126	162	165	163
Remainder of Northern .. .. .	115	89	128	101
<b>East and West Ridings</b> .. .. .	<b>106</b>	<b>95</b>	<b>96</b>	<b>87</b>
West Yorkshire conurbation .. .. .	93	96	91	85
Remainder of East and West Ridings .. .. .	115	94	100	88
<b>North Western</b> .. .. .	<b>127</b>	<b>103</b>	<b>118</b>	<b>103</b>
South East Lancashire conurbation .. .. .	116	96	104	90
Merseyside conurbation .. .. .	189	158	153	174
Remainder of North Western .. .. .	109	82	113	77
<b>North Midland</b> .. .. .	<b>74</b>	<b>83</b>	<b>84</b>	<b>90</b>
<b>Midland</b> .. .. .	<b>121</b>	<b>102</b>	<b>86</b>	<b>101</b>
West Midlands conurbation .. .. .	147	120	77	112
Remainder of Midland .. .. .	97	85	96	90
<b>Eastern</b> .. .. .	<b>55</b>	<b>74</b>	<b>81</b>	<b>82</b>
<b>London and South Eastern</b> .. .. .	<b>97</b>	<b>117</b>	<b>92</b>	<b>103</b>
Greater London .. .. .	103	126	100	110
Remainder of South Eastern .. .. .	82	88	70	81
<b>Southern</b> .. .. .	<b>67</b>	<b>84</b>	<b>83</b>	<b>89</b>
<b>South Western</b> .. .. .	<b>87</b>	<b>82</b>	<b>94</b>	<b>88</b>
<b>Wales (including Monmouthshire)</b> .. .. .	<b>126</b>	<b>113</b>	<b>151</b>	<b>136</b>
Wales I (South East) .. .. .	111	116	147	146
Wales II (Remainder) .. .. .	164	107	159	108
<b>Urban and rural aggregates :</b>				
Conurbations .. .. .	117	122	104	113
<i>Areas outside conurbations :</i>				
Urban areas with populations of 100,000 and over .. .. .	116	116	123	106
Urban areas with populations of 50,000 and under 100,000 .. .. .	112	99	99	99
Urban areas with populations under 50,000 .. .. .	82	87	90	92
Rural districts .. .. .	75	63	89	78

\* See footnote to Table LIV.



Diagram 4



Males

Standardised mortality ratios

Females



Males

Standardised notification ratios

Females



Tuberculosis of the respiratory system: Standardised mortality ratios and standardised notification ratios in the standard regions, by sex, 1957, England and Wales

Table LIX. Tuberculosis of the respiratory system : Death rates per million living, by sex and age, and notifications\* per 100 deaths in standard regions and urban and rural aggregates within regional groups, 1957, England and Wales

	Males						Females						Persons	
													All ages	Notifica- tions per 100 deaths
	All ages	0-	5-	15-	25-	45- 65 and over	All ages	0-	5-	15-	25-	45- 65 and over		
<b>ENGLAND AND WALES</b>														
Urban and rural aggregates :	146	3	1	8	73	284	47	4	1	9	72	54	89	95
Conurbations .. .. .	169	—	1	11	80	314	49	3	1	10	73	59	92	106
<i>Areas outside conurbations :</i>														
Urban areas with populations of 100,000 and over .. .. .	167	—	4	—	81	322	57	—	—	16	98	65	93	110
Urban areas with populations of 50,000 and under 100,000 .. .. .	164	15	—	14	79	301	47	—	—	—	84	54	76	103
Urban areas with populations under 50,000 .. .. .	123	—	—	10	61	247	43	6	—	12	64	44	90	81
Rural districts .. .. .	108	9	—	3	63	232	41	6	1	2	59	51	86	75
<b>NORTH OF ENGLAND</b>														
Regions :														
Northern .. .. .	165	15	—	9	98	324	62	8	—	19	107	60	134	113
East and West Ridings .. .. .	156	6	6	17	88	276	45	—	—	8	77	59	61	98
North Western .. .. .	185	—	—	14	90	375	56	—	—	8	99	69	73	117
Conurbations :														
Tyneside .. .. .	177	—	—	—	154	330	75	—	—	18	133	63	176	124
West Yorkshire .. .. .	140	—	8	24	96	228	44	—	—	10	68	52	71	89
South East Lancashire .. .. .	170	—	—	24	81	363	49	—	—	14	75	66	71	106
Merseyside .. .. .	247	—	—	—	144	500	68	—	—	10	170	74	34	153
<i>Areas outside conurbations :</i>														
Urban areas with populations of 100,000 and over .. .. .	231	—	7	—	128	434	67	—	—	18	112	90	88	145
Urban areas with populations of 50,000 and under 100,000 .. .. .	194	48	—	16	55	302	56	—	—	—	120	60	66	122
Urban areas with populations under 50,000 .. .. .	141	—	—	25	63	302	47	—	—	11	71	53	100	93
Rural districts .. .. .	124	14	—	7	63	257	45	15	—	—	69	61	79	85

\* See footnote to Table LIV.

Table LIX—continued.

	Males						Females						Persons			
	All ages	0—	5—	15—	25—	45—	65 and over	All ages	0—	5—	15—	25—	45—	65 and over	All ages	Notifica- tions per 100 deaths
MIDLANDS AND EASTERN																
Regions :																
North Midland .. .. .	107	6	—	14	65	200	415	39	—	—	5	72	44	57	72	777
Midland .. .. .	167	—	—	—	64	380	646	39	—	—	10	55	54	79	102	654
Eastern .. .. .	80	—	—	4	42	162	283	38	16	—	15	55	34	82	59	856
Conurbation :																
West Midlands .. .. .	200	—	—	15	71	464	816	35	—	—	13	54	63	22	115	666
Areas outside conurbation :																
Urban areas with populations of 100,000 and over .. .. .	142	—	—	—	66	270	618	47	—	—	—	84	38	112	92	759
Urban areas with populations of 50,000 and under 100,000 .. .. .	139	—	—	28	95	309	389	39	—	—	—	72	56	41	88	715
Urban areas with populations under 50,000 .. .. .	95	—	—	6	45	181	369	38	19	—	22	52	39	76	66	816
Rural districts .. .. .	78	8	—	—	41	165	273	36	—	—	5	53	39	89	57	722
GREATER LONDON .. .. .	151	—	—	7	62	250	730	48	7	2	8	57	54	119	97	811
SOUTH OF ENGLAND																
Regions :																
Remainder of South Eastern .. .. .	128	10	—	—	87	242	370	35	—	—	6	41	39	76	78	689
Southern .. .. .	94	—	—	—	48	218	312	39	10	—	6	61	55	55	66	849
South Western .. .. .	129	—	4	5	63	237	497	45	—	—	5	74	45	87	86	633
Urban areas with populations of 100,000 and over .. .. .	138	—	9	—	51	261	586	50	—	—	33	95	59	41	92	826
Urban areas with populations of 50,000 and under 100,000 .. .. .	150	—	—	—	70	280	565	45	—	—	—	65	49	90	94	652
Urban areas with populations under 50,000 .. .. .	110	—	—	—	60	215	366	33	—	—	—	44	31	82	69	773
Rural districts .. .. .	102	9	—	4	75	217	283	40	9	—	—	55	54	73	71	609
WALES (including Monmouthshire)	189	—	—	6	102	390	597	70	—	5	12	107	69	163	128	623
Wales I (South East) .. .. .	164	—	—	9	77	340	557	68	—	7	8	120	61	142	115	732
Wales II (Remainder)	253	—	—	—	172	522	683	76	—	—	22	73	89	203	162	428
Urban areas with populations of 100,000 and over .. .. .	142	—	—	—	70	322	440	84	—	—	24	114	96	206	112	820
Urban area with population of 50,000 and under 100,000 .. .. .	347	—	—	—	385	526	909	66	—	—	—	—	—	556	202	617
Urban areas with populations under 50,000 .. .. .	184	—	—	15	99	358	618	70	—	—	14	129	66	130	126	631
Rural districts .. .. .	220	—	—	—	112	480	649	59	—	17	—	77	59	152	140	487



Table LX. Tuberculosis of the respiratory system : Notification rates\* per 100,000 living, by sex and age, in standard regions, 1957, England and Wales

	Males							Females							Persons
	All ages	0—	5—	15—	25—	45—	65 and over	All ages	0—	5—	15—	25—	45—	65 and over	All ages
ENGLAND AND WALES	82	26	23	99	93	114	90	49	30	27	116	72	29	18	65
Standard Regions :															
Northern .. ..	88	38	34	110	100	121	75	59	33	36	142	85	31	17	73
East and West Ridings ..	78	24	22	88	89	107	95	43	24	27	101	59	29	12	60
North Western .. ..	85	25	26	99	95	119	94	51	38	32	127	74	26	14	67
North Midland .. ..	68	22	23	102	71	93	71	45	27	29	112	57	29	17	56
Midland .. ..	83	34	30	108	95	113	70	51	55	35	124	66	22	18	67
Eastern .. ..	61	23	19	76	73	83	54	40	29	22	83	63	22	20	50
London and South Eastern	97	29	18	123	108	132	122	51	25	21	115	78	33	20	72
Southern .. ..	70	16	15	65	86	105	84	44	16	21	78	72	30	25	56
South Western .. ..	68	19	20	75	80	91	81	43	11	23	103	69	25	18	54
Wales (including Mon- mouthshire).. ..	93	24	34	113	105	134	84	68	36	31	171	96	39	28	80
Wales I (South East) ..	95	22	36	123	107	136	76	74	36	36	181	104	44	28	84
Wales II (Remainder)	89	29	28	90	100	129	100	52	35	18	144	75	27	27	69

\* See footnote to Table LIV.

The general picture revealed by study of the S.M.R.s and S.N.R.s for regions and individual conurbations is similar to that shown in 1956. There were high S.M.R.s for males in the Merseyside conurbation (189), the West Midlands conurbation (147), and Wales (other than South East Wales) (164), and for females in the Tyneside (165), and Merseyside (153), conurbations, and in Wales (151). The unfavourable mortality of males in the West Midlands conurbation (147) should be compared with the favourable position of females in the same area (77). Although differences do occur in other regions between the S.M.R.s of males and females in none does it reach the same magnitude. The difference does not extend to the S.N.R.s. Areas with low mortality include the Eastern, Southern and South Western regions. The maps in Diagram 4 (page 100) show the S.M.R.s and S.N.R.s for males and females in standard regions.

**Table LXI. Tuberculosis of the respiratory system: Ratio of deaths per 100 notifications\*, by sex and age, and equivalent average notification rates for persons aged 15-44 in standard regions, 1957, England and Wales**

	E.A.N.R.	Ratio of deaths per 100 notifications							
		Males				Females			
		15-44	15-	25-	45-	65 and over	15-	25-	45-
<b>ENGLAND AND WALES</b>	<b>91</b>	<b>1</b>	<b>78</b>	<b>25</b>	<b>61</b>	<b>1</b>	<b>10</b>	<b>19</b>	<b>48</b>
Standard regions:									
Northern .. ..	104	1	10	27	83	1	13	19	79
East and West Ridings ..	81	2	10	26	63	1	13	20	50
North Western .. ..	94	1	9	31	70	1	13	26	53
North Midland .. ..	78	—	9	22	58	0	13	15	34
Midland .. ..	92	1	7	33	92	1	8	24	44
Eastern .. ..	72	1	6	19	52	2	9	16	40
London and South Eastern .. ..	101	0	6	19	51	1	7	15	53
Southern .. ..	76	—	6	21	37	1	8	18	21
South Western .. ..	79	1	8	26	61	1	11	18	49
Wales (including Monmouthshire) .. ..	115	1	10	29	71	1	11	18	58
Wales I (South East) .. ..	121	1	7	25	73	0	12	14	50
Wales II (Remainder) .. ..	97	—	17	41	68	2	10	33	75

\* See footnote to Table LIV.

Table LX (page 103) shows the notification rate for respiratory tuberculosis per 100,000 living by sex, age, and region. It has already been explained why notification rates cannot necessarily be taken as an accurate indication of regional morbidity. Among males the highest crude notification rate was in the London and South Eastern region, and in Wales I (South East) for females. The highest age-specific notification rate was also to be found in Wales I, where for women aged 15-24 the rate was 181 per 100,000 population.

Table LXI (above) shows the ratio of deaths per 100 notifications by sex and age.

### Mass miniature radiography statistics

Tables LXII and LXIII (pages 106-108) show for males and females respectively the number of examinations made and the number of cases of respiratory tuberculosis requiring close supervision found by Mass Miniature Radiography units in 1957.

There were 3,514,600 examinations made in 1957 and 6,481 cases of respiratory tuberculosis were found requiring treatment or close clinic supervision. This represents a rate of 1·8 cases per 1,000 examinations compared with 2·0 in 1956.

The number of cases found was equal to 22 per cent of all cases of respiratory tuberculosis notified.

The individual categories of persons examined presented approximately the same general picture as in previous years. The highest incidence of cases was found among cases referred by general practitioners, although for both sexes the rates were slightly lower in 1957 than in 1956. The largest number of examinations was conducted among members of the general public and in factories, offices, etc. Together they were responsible for 75 per cent of all examinations, but produced only 60 per cent of the cases.



**Table LXII.** Numbers of examinations made among males and cases of respiratory tuberculosis\* requiring treatment or close clinic supervision observed by mass radiography units, distinguishing age and category of person examined. Rates per 1,000 examinations, 1957, England and Wales

(The total numbers of examinations have been derived from a 10 per cent sample of record cards)

Category of persons examined	Males											
	Age-groups											
	All ages	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated
Out-patients and in-patients of hospitals	Total number of examinations .. ..	8,720	160	80	420	690	1,390	1,660	2,110	780	570	860
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	14 1.6	— —	— —	— —	— —	3 2.2	1 0.6	2 0.9	4 5.1	3 5.3	1 1.2
H.M. Forces recruits	Total number of examinations .. ..	85,610	—	90	49,400	34,690	1,320	80	—	—	—	30
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	89 1.0	— —	— —	49 1.0	40 1.2	— —	— —	— —	— —	— —	— —
Persons referred by general practitioners	Total number of examinations .. ..	107,860	5,030	1,100	7,530	10,510	21,450	19,420	19,690	9,200	6,730	40
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	1,140 10.6	13 2.6	6 5.5	67 8.9	87 8.3	212 9.9	194 10.0	250 12.7	134 14.6	82 12.2	95 13.3
School children (School groups)	Total number of examinations .. ..	172,680	62,880	59,210	50,580	—	—	—	—	—	—	10
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	104 0.6	45 0.7	31 0.5	28 0.6	— —	— —	— —	— —	— —	— —	— —
Contacts	Total number of examinations .. ..	27,520	8,510	2,770	3,880	1,580	3,570	3,580	2,310	580	300	20
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	61 2.2	10 1.2	3 1.1	8 2.1	5 3.2	10 2.8	12 3.4	5 2.2	3 5.2	2 6.7	3 7.1
Persons covered by special surveys	Total number of examinations .. ..	7,690	180	20	440	390	1,280	1,680	1,870	820	650	—
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	9 1.2	1 5.6	— —	— —	— —	1 0.8	2 1.2	2 1.1	1 1.2	1 1.5	1 2.8
Persons in factories/offices (General surveys)	Total number of examinations .. ..	1,030,390	—	—	86,130	111,330	264,190	245,150	200,160	68,140	39,660	460
	Number with respiratory tuberculosis requiring treatment or close supervision .. .. Rate .. ..	1,459 1.4	— —	— —	88 1.0	157 1.4	336 1.3	314 1.3	315 1.6	147 2.2	66 1.7	36 2.4

Persons in prisons, Borstals, etc.	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate												
	14,570	360	330	2,380	1,930	2,890	2,050	1,430	510	470	2,210	10	
	101 6.9	—	—	2.1	3 1.6	14 4.8	11 5.4	19 13.3	16 31.4	17 36.2	16 7.2	—	
General public volunteers	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate												
	439,710	12,770	3,540	31,070	37,450	104,870	100,180	77,050	28,260	18,590	25,810	120	
	948 2.2	10 0.8	—	38 1.2	86 2.3	221 2.1	196 2.0	184 2.4	92 3.3	54 2.9	67 2.6	—	
Persons residing in or employed at mental hospitals and mental institutions	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate												
	38,570	590	170	1,410	2,040	6,470	7,610	8,590	3,520	2,810	5,330	30	
	108 2.8	—	—	0.7	4 2.0	16 2.5	24 3.2	28 3.3	9 2.6	9 3.2	17 3.2	—	
All groups	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate												
	1,933,320	90,480	67,310	233,240	200,610	407,430	381,410	313,210	111,810	69,780	57,320	720	
	4,033 2.1	79 0.9	40 0.6	284 1.2	382 1.9	813 2.0	754 2.0	805 2.6	406 3.6	234 3.4	236 4.1	—	

\* Cases known to be tuberculous before this examination are excluded from this tabulation.

**Table LXIII.** Numbers of examinations made among females and cases of respiratory tuberculosis\* requiring treatment or close clinic supervision observed by mass radiography units, distinguishing age and category of person examined. Rates per 1,000 examinations, 1957, England and Wales

*(The total numbers of examinations have been derived from a 10 per cent sample of record cards)*

Category of persons examined	Females											
	Age-groups											
	All ages	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated
Out-patients and in-patients of hospitals	9,910 1.1	140	80	550 1.8	940	1,720 3	2,030 0.5	2,100 1.4	860	610 1.6	880 2.3	—
H.M. Forces recruits	50	—	—	30	—	10	—	10	—	—	—	—
Persons referred by general practitioners	99,880 6.9	4,990 4.2	1,030 2.9	11,680 88 7.5	14,410 146 10.1	23,340 189 8.1	18,580 126 6.8	12,970 66 5.1	5,040 14 2.8	3,480 19 5.5	4,310 13 3.0	50
School children (School groups)	165,320 0.5	61,930 33 0.5	57,430 28 0.5	45,950 21 0.5	—	—	—	—	—	—	—	10
Contacts	27,990 7.5 2.7	8,340 15 1.8	2,310 3 1.3	3,940 9 2.3	1,710 4 2.3	3,400 22 6.5	3,700 12 3.2	2,870 5 1.7	760 1 1.3	460 1 2.2	470 3 6.4	30
Persons covered by special surveys	5,210 0.3	120	10	680	530	870 1 1.1	1,050 1 1.0	1,210	440	130	160	10
Persons in factories/offices (General surveys)	600,880 670 1.1	—	—	146,250 185 1.3	125,070 182 1.5	115,060 151 1.3	100,490 89 0.9	81,820 50 0.6	22,480 5 0.2	7,270 7 1.0	2,150 1 0.5	290



Persons in prisons, Borstals, etc.	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate	2,500 1.2	100 —	40 —	280 —	100 —	100 —	140 14.3	120 —	100 —	1,380 —
General public volunteers	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate	573,360 783 1.4	12,740 2 0.2	3,670 2 0.5	52,760 88 1.7	60,110 109 1.8	129,210 242 1.9	100,770 97 1.0	35,910 20 0.6	24,390 25 1.0	26,670 23 0.9
Ante-natal cases	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate	57,430 86 1.5	10 —	—	5,280 7 1.3	19,130 23 1.2	26,420 48 1.8	140 —	—	—	50 —
Persons residing in or employed at mental hospitals and mental institutions	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate	38,750 49 1.3	380 —	80 —	1,210 4 3.3	1,800 2 1.1	4,380 11 2.5	7,790 5 0.6	4,120 4 1.0	3,500 1 0.3	9,200 7 0.8
All groups	Total number of examinations Number with respiratory tuberculosis requiring treatment or close supervision Rate	1,581,280 2,448 1.5	88,750 71 0.8	64,650 36 0.6	268,610 403 1.5	223,800 467 2.1	304,510 667 2.2	209,820 228 1.1	69,730 44 0.6	39,940 54 1.4	45,220 49 1.1
											770 2 2.6

\* Cases known to be tuberculous before this examination are excluded from this tabulation.

## CANCER

The deaths assigned to cancer during 1957 numbered 94,017—50,056 of males and 43,961 of females. For each sex these numbers are the highest yet recorded.

Of these, 82,878 were described as carcinoma, 1,308 as glioma, 1,898 as sarcoma; 4,891 were classed with the reticulosos and 3,042 as cancer undefined.

**Table LXIV. Deaths from cancer by sex and age according to histological type, and death rates per million living, 1957, England and Wales**

				All ages	0-	15-	35-	45-	55-	65 and over
				Number of deaths						
All malignant neoplasms (140-205)	{	M	F	50,056	396	861	1,669	6,404	13,452	27,274
				43,961	294	698	2,237	5,935	9,758	25,039
Carcinoma .. ..	{	M	F	44,008	16	297	1,170	5,417	11,961	25,147
				38,870	23	379	1,836	5,161	8,631	22,840
Glioma .. ..	{	M	F	740	47	81	108	198	216	90
				568	38	43	80	147	181	79
Sarcoma .. ..	{	M	F	904	87	132	86	140	180	279
				994	54	89	89	163	213	386
Reticuloses .. ..	{	M	F	2,727	233	336	259	432	587	880
				2,164	171	165	169	278	472	909
Undefined .. ..	{	M	F	1,677	13	15	46	217	508	878
				1,365	8	22	63	186	261	825
				Death rates per million persons living						
All malignant neoplasms (140-205)				2,094	67	134	615	1,922	4,639	9,934
Carcinoma .. ..				1,846	4	58	473	1,648	4,116	9,113
Glioma .. ..				29	8	11	30	54	79	32
Sarcoma .. ..				42	14	19	28	47	79	126
Reticuloses .. ..				109	39	43	67	111	212	340
Undefined .. ..				68	2	3	17	63	154	323

The proportion of carcinomata was the same in each sex, and there was very little difference among the gliomata, but a slightly higher proportion of sarcomata was recorded in women and a higher proportion of the reticulosos in men (Table LXIV, above). The following table compares the proportions recorded in 1957 with those in 1950. Little change can be noted, though the proportion classified as reticulosos has risen by about one per cent in each sex.

	1950		1957	
	Male	Female	Male	Female
<b>All cancer deaths</b>	<b>43,570</b>	<b>41,700</b>	<b>50,056</b>	<b>43,961</b>
	Percentage of all cancer			
Carcinoma .. ..	88	90	88	88
Glioma .. ..	1.3	1.0	1.5	1.3
Sarcoma .. ..	2.6	2.3	1.8	2.3
Reticuloses .. ..	4.5	3.6	5.4	4.9
Cancer undefined ..	3.4	3.4	3.4	3.1

The death rate from all types of cancer increases with age, but at all ages the rate among the carcinomata exceeds by many times that of any of the three remaining groups. The death rate from gliomata varies least with age, rising to a peak between 55 and 64 years and later falling. Under the age of 15 years the reticuloses are the most frequent cause of death, followed by sarcoma, glioma, and carcinoma, in that order, but in all subsequent age-groups deaths from carcinoma exceed those from all other groups, with deaths from the reticuloses taking second place.

#### The relative importance of cancer as a cause of death at various ages

The number and proportion of deaths due to cancer at different ages are shown in Table LXV (page 112). The cancer deaths are further divided into five main site groups, and the percentage of cancer deaths to deaths from all causes at different ages given for each of these site groups. The table is illustrated graphically in Diagram 5 (page 117), but here cancer of the buccal cavity and pharynx, which at all ages accounts for but a small proportion of the total cancer, has been combined with the residual group "other sites".





## Females

All causes	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	248,463 100	8,280 100	1,094 100	1,371 100	2,624 100	6,182 100	14,915 100	30,742 100	62,110 100	84,499 100	36,646 100
All malignant neoplasms (140-205)	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	43,961 17.7	134 1.6	160 14.6	158 11.5	540 20.6	2,237 36.2	5,935 39.8	9,758 31.7	12,281 19.8	10,315 12.2	2,443 6.7
Buccal cavity and pharynx (140-148)	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	669 0.3	2 0.0	3 0.3	— —	7 0.3	30 0.5	73 0.5	148 0.5	193 0.3	166 0.2	47 0.1
Digestive organs and peritoneum (150-159)	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	17,998 7.2	5 0.1	3 0.3	11 0.8	85 3.2	448 7.2	1,428 9.6	3,321 10.8	5,641 9.1	5,651 6.7	1,405 3.8
Respiratory system (160-165)	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	3,002 1.2	— —	— —	8 0.6	30 1.1	152 2.5	470 3.2	833 2.7	877 1.4	553 0.7	79 0.2
Breast and genito-urinary organs (170-181)	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	17,253 6.9	12 0.1	13 1.2	23 1.7	230 8.8	1,237 20.0	3,247 21.8	4,362 14.2	4,338 7.0	3,074 3.6	717 2.0
Lymphatic and haemato- poietic tissues (200-205)	$\left\{ \begin{matrix} (a) \\ (b) \end{matrix} \right\}$	2,164 0.9	82 1.0	89 8.1	60 4.4	105 4.0	169 2.7	278 1.9	472 1.5	542 0.9	324 0.4	43 0.1

Table LXVI. Deaths from cancer at various sites : (a) numbers, and (b) as a percentage of all cancer deaths, by sex and age, 1957, England and Wales

Cause of death (and I.S.C. Nos.)	Males								Females							
	All ages	0—	25—	35—	45—	55—	65—	75 and over	All ages	0—	25—	35—	45—	55—	65—	75 and over
All sites (140-205) .. { (a) (b)	50,056 100	696 100	561 100	1,669 100	6,404 100	13,452 100	15,678 100	11,596 100	43,961 100	452 100	540 100	2,237 100	5,935 100	9,758 100	12,281 100	12,758 100
All cancer less lung, bron- chus and pleura (140- 161, 162 pt., 164, 165 pt., 170-205)	33,627 67.2	682 98.0	499 88.9	1,140 68.3	3,529 55.1	7,297 54.2	10,568 67.4	9,912 85.5	41,265 93.9	446 98.7	514 95.2	2,109 94.3	5,498 92.6	8,989 92.1	11,498 93.6	12,211 95.7
Lip (140) .. .. { (a) (b)	83 0.2	—	—	1 0.1	—	9 0.1	23 0.1	50 0.4	9 0.0	—	—	—	—	—	1 0.0	8 0.1
Tongue (141) .. .. { (a) (b)	336 0.7	—	1 0.2	4 0.2	13 0.2	54 0.4	121 0.8	143 1.2	158 0.4	—	2 0.4	6 0.3	14 0.2	23 0.2	51 0.4	62 0.5
Mouth and tonsil (143, { 144, 145.1) .. { (a) (b)	365 0.7	1 0.1	1 0.2	6 0.4	19 0.3	68 0.5	114 0.7	156 1.3	135 0.3	1 0.2	—	1 0.0	6 0.1	33 0.3	33 0.7	61 0.5
Pharynx (145.0, { 146-148) .. { (a) (b)	394 0.8	11 1.6	2 0.4	10 0.6	39 0.6	65 0.5	154 10.0	113 1.0	303 0.7	3 0.7	4 0.7	19 0.8	47 0.8	80 0.8	93 0.8	57 0.4
Jaw (196.1) .. .. { (a) (b)	75 0.1	1 0.1	—	1 0.1	1 0.0	9 0.1	22 0.1	41 0.4	60 0.1	—	1 0.2	1 0.0	3 0.1	11 0.1	20 0.2	24 0.2
Oesophagus (150) .. { (a) (b)	1,312 2.6	1 0.1	4 0.7	24 1.4	123 1.9	270 2.0	449 2.9	441 3.8	963 2.2	—	1 0.2	15 0.7	90 1.5	166 1.7	306 2.5	385 3.0
Stomach and duodenum { (151, 152.1) .. { (a) (b)	8,021 16.0	3 0.4	50 8.9	202 12.1	986 15.4	2,047 15.2	2,652 16.9	2,081 17.9	6,030 13.7	3 0.7	33 6.1	138 6.2	396 6.7	1,079 11.1	1,966 16.0	2,415 18.9
Intestine, except rectum { and duodenum (152.0, { 153) .. { (a) (b)	3,872 7.7	6 0.9	35 6.2	123 7.4	346 5.4	729 5.4	1,232 7.9	1,401 12.1	5,480 12.5	4 0.9	23 4.3	132 5.9	449 7.6	976 10.0	1,592 13.0	2,304 18.1
Rectum (154) .. .. { (a) (b)	3,116 6.2	4 0.6	22 3.9	62 3.7	260 4.1	620 4.6	1,079 6.9	1,069 9.2	2,291 5.2	—	12 2.2	72 3.2	212 3.6	417 4.3	718 5.8	860 6.7
Liver (155.1, 156) .. { (a) (b)	652 1.3	2 0.3	3 0.5	29 1.7	51 0.8	182 1.4	220 1.4	165 1.4	543 1.2	5 1.1	5 0.9	23 1.0	52 0.9	110 1.1	178 1.4	170 1.3
Gallbladder and duct { (155.0) .. { (a) (b)	377 0.8	1 0.1	1 0.2	9 0.5	46 0.7	104 0.8	124 0.8	92 0.8	715 1.6	—	2 0.4	14 0.6	47 0.8	149 1.5	255 2.1	248 1.9
Pancreas (157) .. .. { (a) (b)	1,893 3.8	1 0.1	9 1.6	48 2.9	238 3.7	492 3.7	658 4.2	447 3.9	1,722 3.9	1 0.2	4 0.7	48 2.1	140 2.4	354 3.6	552 4.5	623 4.9



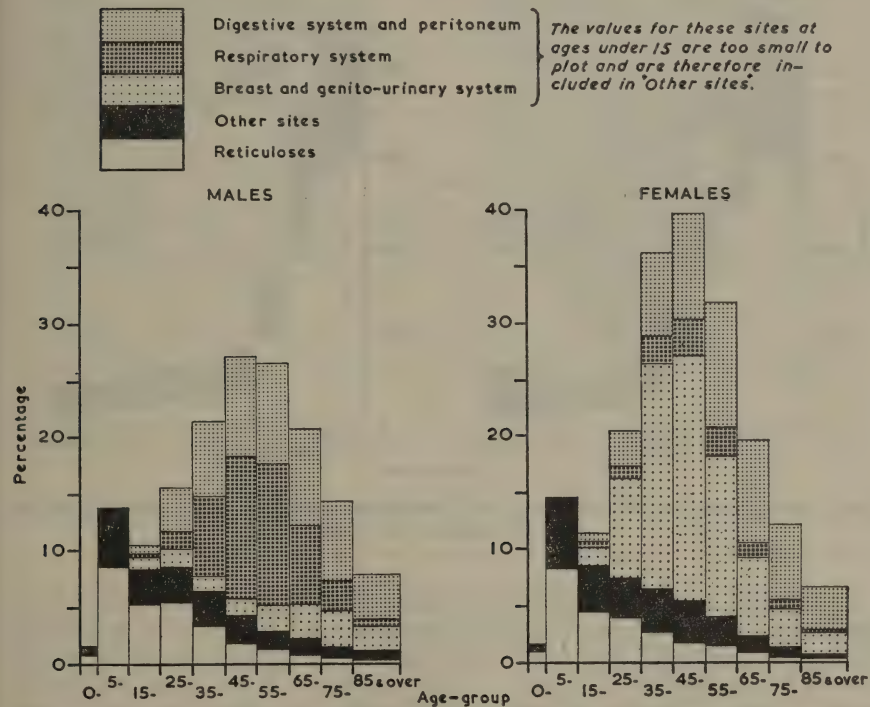
Peritoneum (158)	163 0.3	8 1.1	8 1.4	13 0.8	28 0.4	43 0.3	38 0.2	25 0.2	230 0.5	6 1.3	5 0.9	6 0.3	40 0.7	64 0.7	66 0.5	43 0.3
Larynx, trachea 162-1, 165-1	684 1.4	1 0.1	3 0.5	10 0.6	60 0.9	178 1.3	231 1.5	201 1.7	183 0.4	—	2 0.4	12 0.5	23 0.4	47 0.5	56 0.5	43 0.3
Lung, bronchus and pleura (162-2, 162-3, 163, 165-2, 165-3)	16,429 32.8	14 2.0	62 11.1	529 31.7	2,875 44.9	6,155 45.8	5,110 32.6	1,684 14.5	2,696 6.1	6 1.3	26 4.8	128 5.7	437 7.4	769 7.9	783 6.4	547 4.3
Mediastinum (164)	57 0.1	1 0.1	—	4 0.2	13 0.2	22 0.2	10 0.1	7 0.1	36 0.1	—	1 0.2	8 0.4	4 0.1	6 0.1	6 0.0	11 0.1
Prostate (177)	3,475 6.9	2 0.3	1 0.2	5 0.3	43 0.7	339 2.5	1,297 8.3	1,788 15.4	—	—	—	—	—	—	—	—
Testis (178)	175 0.3	26 3.7	41 7.3	38 2.3	20 0.3	19 0.1	20 0.1	11 0.1	—	—	—	—	—	—	—	—
Penis (179-2)	103 0.2	—	—	1 0.1	14 0.2	13 0.1	30 0.2	45 0.4	—	—	—	—	—	—	—	—
Uterus (171-174)	—	—	—	—	—	—	—	—	3,939 9.0	5 1.1	87 16.1	333 14.9	676 11.4	1,046 10.7	1,028 8.4	764 6.0
Ovary and Fallopian tube (175-1, 175-2)	—	—	—	—	—	—	—	—	2,871 6.5	15 3.3	37 6.9	235 10.5	687 11.6	862 8.8	653 5.3	382 3.0
Vagina, vulva (176-1, 176-2)	—	—	—	—	—	—	—	—	498 1.1	1 0.2	1 0.2	13 0.6	41 0.7	87 0.9	156 1.3	199 1.6
Breast (170)	70 0.1	—	—	1 0.1	5 0.1	22 0.2	24 0.2	18 0.2	8,613 19.6	6 1.3	96 17.8	631 28.2	1,760 29.7	2,102 21.5	2,068 16.8	1,950 15.3
Kidney (180)	704 1.4	28 4.0	7 1.2	26 1.6	130 2.0	217 1.6	197 1.3	99 0.9	433 1.0	18 4.0	9 1.7	11 0.5	33 0.6	114 1.2	134 1.1	114 0.9
Bladder, urethra (181)	2,052 4.1	7 1.0	4 0.7	35 2.1	164 2.6	460 3.4	692 4.4	690 6.0	875 2.0	2 0.4	—	12 0.5	46 0.8	145 1.5	294 2.4	376 2.9
Skin (190, 191)	461 0.9	4 0.6	19 3.4	22 1.3	41 0.6	73 0.5	123 0.8	179 1.5	501 1.1	11 2.4	19 3.5	47 2.1	51 0.9	59 0.6	116 0.9	198 1.6
Scrotum (179-1)	34 0.1	—	—	—	3 0.0	7 0.1	14 0.1	10 0.1	—	—	—	—	—	—	—	—
Bones, except jaw 196-0, 196-2)	390 0.8	44 6.3	15 2.7	28 1.7	48 0.7	95 0.7	91 0.6	69 0.6	314 0.7	35 7.7	7 1.3	14 0.6	31 0.5	47 0.5	89 0.7	91 0.7
Thyroid gland (194)	89 0.2	—	3 0.5	2 0.1	9 0.1	18 0.1	37 0.2	20 0.2	264 0.6	1 0.2	—	4 0.2	24 0.4	58 0.6	81 0.7	96 0.8

Table LXVI—continued

Cause of death (and I.S.C. Nos.)	Males								Females							
	All ages	0—	25—	35—	45—	55—	65—	75 and over	All ages	0—	25—	35—	45—	55—	65—	75 and over
Hodgkin's disease (201){ (a) (b)	584 1.2	68 9.8	85 15.2	101 6.1	116 1.8	108 0.8	70 0.4	36 0.3	288 0.7	22 4.9	38 7.0	37 1.7	45 0.8	63 0.6	53 0.4	30 0.2
Leukaemia and aleu- kaemia (204)	1,301 2.6	253 36.4	72 12.8	97 5.8	149 2.3	249 1.9	271 1.7	210 1.8	1,093 2.5	171 37.8	56 10.4	100 4.5	142 2.4	193 2.0	236 1.9	195 1.5
Neoplasms (malignant, benign and unspecified) of brain and central nervous system (193){ (a) (b) 223, 237)	1,369 2.7	146 21.0	88 15.7	175 10.5	375 5.9	391 2.9	167 1.1	27 0.2	1,125 2.6	126 27.9	60 11.1	138 6.2	257 4.3	336 3.4	175 1.4	33 0.3

In both sexes the pattern is roughly the same. Under the age of 5 years only about one and one-half per cent of all deaths are due to cancer, but between 5 and 15 the proportion rises to nearly 15 per cent, falling again in the age-group 15-24 to just over 10 per cent. Thereafter the proportion rises in each decade to a maximum in the age-group 45-54, when 27 per cent of male and nearly 40 per cent of female deaths are attributed to cancer. In subsequent age-groups the proportionate cancer mortality falls until, at 85 years and upwards, under 8 per cent of male and 7 per cent of female deaths are ascribed to cancer.

Diagram 5



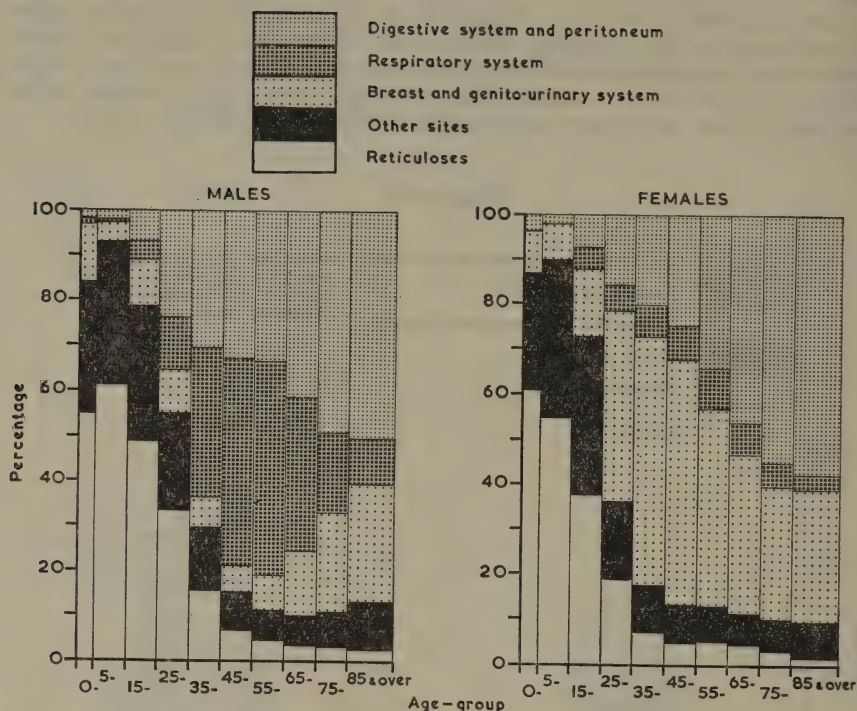
Deaths from cancer at certain sites expressed as percentages of deaths from all causes, by sex and age, 1957, England and Wales

Between the ages of 25 and 64 a greater proportion of female than male deaths is due to cancer; before this period there is little difference between the sexes, but from 65 years onwards cancer becomes a more frequent cause of death in men than in women. At these later ages and in both sexes the most frequent site of cancer is in the digestive tract, but in middle life cancer of the breast and genito-urinary organs predominates in women, and cancer of the respiratory system in men.

At the present time cancer of the digestive organs accounts in both sexes and in each age-group between 35 and 84 for between about 6 and 10 per cent of all deaths. Except among those aged 75 and over the proportion due to digestive cancer is greater in women than in men, but in both sexes the highest proportion is found in the age-group 55-64.



Diagram 6



Deaths from cancer at certain sites expressed as percentages of all deaths from cancer, by sex and age, 1957, England and Wales

Respiratory cancer in men is most prominent as a cause of death between the ages of 35 and 74, being at a maximum between 45 and 64, when it is responsible for rather more than 12 per cent of all deaths, while between 35 and 44, and 65 and 74, it causes about 7 per cent. In women cancer of the breast and genito-urinary system is the most frequent cause of death from cancer between the ages of 25 and 64, being at its maximum between the ages of 35 and 54, when more than 20 per cent of all female deaths are ascribed to this cause.

### The relative importance of various sites of cancer at different ages

A more detailed analysis by individual site, showing the proportion of deaths at each individual site to the total deaths from cancer in different age-groups, is given in Table LXVI (page 114). In Diagram 6 (above) this is shown graphically, but deaths are grouped as in the table below, which is constructed in the same manner as Table LXV. The diagram shows how the proportion of deaths assigned to cancer of the digestive system steadily increases with age, until among those aged 75 and over it accounts for one-half of all cancer. The reticuloses on the other hand, which cause about one-half of all cancer deaths below the age of 15 years, steadily diminish in relative importance in each subsequent age-group, being the cause of less than 5 per cent of cancer deaths at 55-64 years and falling to 2 per cent in the oldest age-groups.

Cause of death	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over
Males											
All malignant neo-plasms (140-205) { (a) (b)	50,056 100	170 100	226 100	300 100	561 100	1,669 100	6,404 100	13,452 100	15,678 100	10,061 100	1,535 100
Digestive organs and peritoneum (150-159) { (a) (b)	19,428 38.8	3 1.8	4 1.8	19 6.3	132 23.5	511 30.6	2,079 32.5	4,495 33.4	6,456 41.2	4,959 49.3	770 50.2
Respiratory system (160-165) { (a) (b)	17,284 34.5	2 1.2	1 0.4	13 4.3	65 11.6	553 33.1	2,958 46.2	6,383 47.5	5,388 34.4	1,766 17.6	155 10.1
Breast and genito-urinary organs (170-181) { (a) (b)	6,615 13.2	22 12.9	10 4.4	31 10.3	53 9.4	107 6.4	379 5.9	1,078 8.0	2,274 14.5	2,256 22.4	405 26.4
Lymphatic and haematopoietic tissues (200-205) { (a) (b)	2,727 5.4	94 55.3	139 61.5	147 49.0	189 33.7	259 15.5	432 6.7	587 4.4	542 3.5	301 3.0	37 2.4
Other and unspecified sites (rem.) (140-205) { (a) (b)	4,002 8.0	49 28.8	72 31.9	90 30.0	122 21.7	239 14.3	556 8.7	909 6.8	1,018 6.5	779 7.7	168 10.9
Females											
All malignant neo-plasms (140-205) { (a) (b)	43,961 100	134 100	160 100	158 100	540 100	2,237 100	5,935 100	9,758 100	12,281 100	10,315 100	2,443 100
Digestive organs and peritoneum (150-159) { (a) (b)	17,998 40.9	5 3.7	3 1.9	11 7.0	85 15.7	448 20.0	1,428 24.1	3,321 34.0	5,641 45.9	5,651 54.8	1,405 57.5
Respiratory system (160-165) { (a) (b)	3,002 6.8	— —	— —	8 5.1	30 5.6	152 6.8	470 7.9	833 8.5	877 7.1	553 5.4	79 3.2
Breast and genito-urinary organs (170-181) { (a) (b)	17,253 39.2	12 9.0	13 8.1	23 14.6	230 42.6	1,237 55.3	3,247 54.7	4,362 44.7	4,338 35.3	3,074 29.8	717 29.3
Lymphatic and haematopoietic tissues (200-205) { (a) (b)	2,164 4.9	82 61.2	89 55.6	60 38.0	105 19.4	169 7.6	278 4.7	472 4.8	542 4.4	324 3.1	43 1.8
Other and unspecified sites (rem.) (140-205) { (a) (b)	3,544 8.1	35 26.1	55 34.4	56 35.4	90 16.7	231 10.3	512 8.6	770 7.9	883 7.2	713 6.9	199 8.1

In men cancer of the lung and bronchus accounts for nearly one-third of all deaths from cancer, causing nearly 30 per cent of cancer deaths between the ages of 35 and 74, and 45 per cent between the ages of 45 and 64. Cancer of the prostate, to which are ascribed about 7 per cent of all male cancer deaths, is responsible for more than 8 per cent between the ages of 65 and 74, but more than 15 per cent among those aged 75 and over.

In women the highest proportion of deaths assigned to a single site is to cancer of the breast, which causes about 20 per cent of female cancer deaths. Nearly 18 per cent of female deaths in the age-group 25-34, and 30 per cent between the ages 35 and 54 are due to breast cancer, but at later ages the proportion diminishes to 15 per cent in those aged 75 and over. Cancer of the uterus, to which is assigned 9 per cent of all female cancer, is a more important site in early adult than in later life; between the ages of 25 and 34, 16 per cent of cancers occur at this site, but the proportion falls to 6 per cent in the 75 and over group. Cancer of the lung and bronchus now accounts for just over 6 per cent of female cancer deaths, the proportion being highest, nearly 8 per cent, between the ages of 45 and 64.

In both sexes cancer of the stomach causes an increasing proportion of cancer deaths with increasing age. Sixteen per cent of all male cancer deaths and nearly 14 per cent of female cancer deaths are assigned to this cause, but from 75 years and upwards just under 18 per cent of male and 19 per cent of female

deaths are so assigned. The distribution of deaths from cancer of the rectum follows a similar pattern, accounting for 6·2 per cent of male, and 5·2 per cent of female, cancer deaths at all ages, but 9·2 per cent and 6·7 per cent in the oldest age-group. Cancer of the intestine forms a larger proportion of female cancer deaths (12·5 per cent) than of male (7·7 per cent), the proportion rising to 18·1 per cent of female, and 12·1 per cent of male, cancer deaths among those aged 75 and over.

For any given period of time a change in mortality from a disease or group of diseases can for convenience be expressed as a single figure in one of many ways. The crude death rates, that is, the number of deaths divided by the total population, can be compared, or comparison by various methods of standardisation can be used to make allowances for any change that may have occurred in the age-structure of the population. Such single figure comparisons, however carefully constructed, conceal much valuable information. If, for example, an advance in therapy could postpone death from cancer for an appreciable period of time, the result of such an improvement might not be reflected in either the crude or standardised death rate, though the average age at death would be considerably advanced and age-specific death rates would show a decrease at younger, and an increase at older, ages. A decreasing influence of any carcinogenic factor might be expected to show itself first in the incidence of cancer at younger ages, and since the incidence of cancer of most sites increases with age, this effect could be masked by the continued high mortality at older ages. It is thus important to examine changes in mortality as they occur at different age-groups and, to facilitate this, Table LXVII (page 121) has been constructed. In it the death rates in the various age-groups in 1957 are expressed as a percentage of the average death rates of those age-groups during the years 1936-39. The "all ages" figure is a standardised mortality ratio calculated by applying the 1936-39 rates to the 1957 population, separately for each age-group. The sum of the products of each age-group gives the expected number of deaths under the conditions of 1936-39, which, divided into the total deaths in 1957 and expressed as a percentage, gives the figure in the "all ages" column.



Table LXVII. All causes and cancer at various sites : Deaths as a percentage of expected deaths based on 1936-39 experience, by sex and age, and mean age at death, 1957, England and Wales

Cause of death (and I.S.C. Nos.)	Males								Females									
	All ages	0-	25-	35-	45-	55-	65-	75 and over	Mean age at death	All ages	0-	25-	35-	45-	55-	65-	75 and over	Mean age at death
All causes ..	81	40	41	53	71	93	97	89	65.3	71	35	33	51	63	70	75	82	70.0
All cancer (140-205)	119	121	106	106	122	127	115	119	65.1	91	108	98	93	89	89	86	98	69.5
All cancer less lung, bronchus, and pleura (140-161, 162 pt., 164, 165 pt., 170-205)	88	122	108	90	84	78	82	105	66.3	87	108	96	91	84	85	83	95	66.0
Lip (140) .. .. .	25	—	—	33	—	18	23	30	75.9	26	—	—	—	—	—	12	35	80.8
Tongue (141) .. .. .	29	—	—	44	15	17	27	48	71.8	84	—	—	100	61	52	77	124	69.4
Mouth and tonsil (143, 144, 145.1) .. .. .	52	—	33	67	36	37	41	90	71.4	105	—	—	17	46	132	79	156	71.4
Pharynx (145.0, 146-148) ..	72	138	67	83	103	45	70	92	67.1	118	100	67	190	102	100	129	146	63.4
Jaw (196.1) .. .. .	16	12	—	8	2	8	14	33	73.4	23	—	33	10	10	21	24	32	70.5
Oesophagus (150) .. .. .	63	—	133	77	77	45	57	87	69.1	95	—	17	52	74	66	95	136	70.6
Stomach and duodenum (151, 152.1) .. .. .	88	38	78	57	74	83	88	112	66.8	73	38	63	61	54	64	68	91	70.6
Intestine, except rectum and duodenum (152.0, 153) ..	69	75	81	82	71	59	62	84	69.1	71	50	42	64	69	70	64	79	70.7
Rectum (154) .. .. .	71	50	61	58	67	57	66	93	69.2	77	—	40	70	68	67	73	94	69.7
Liver (155.1, 156) .. .. .	48	25	33	85	32	56	47	46	66.8	34	62	56	55	41	36	33	29	67.5
Gallbladder and ducts (155.0) .. .. .	103	—	33	150	121	132	97	83	66.5	86	—	—	140	76	79	87	91	69.9
Pancreas (157) .. .. .	136	—	100	102	124	133	146	140	66.6	121	12	67	185	102	108	113	146	69.7
Peritoneum (158) .. .. .	112	50	89	81	127	126	119	156	58.4	100	75	83	38	111	90	110	130	62.8
Larynx, trachea (161, 162.1, 165.1) .. .. .	61	—	100	53	53	53	56	82	68.3	72	—	—	75	59	64	80	78	65.2
Lung, bronchus, and pleura (162.2, 162.3, 163, 165.2, 165.3) .. .. .	432	88	89	171	272	471	651	658	62.7	229	75	144	166	218	228	221	301	64.2

Table LXVII—continued

Cause of death (and I.S.C. Nos.)	Males								Females									
	All ages	0—	25—	35—	45—	55—	65—	75 and over	Mean age at death	All ages	0—	25—	35—	45—	55—	65—	75 and over	Mean age at death
Mediastinum (164) ..	18	12	—	21	22	22	11	22	60·5	22	—	33	80	20	15	12	32	62·6
Prostate (177) ..	132	67	—	42	52	77	120	176	74·6	—	—	—	—	—	—	—	—	—
Testis (178) ..	97	162	95	103	91	83	80	73	43·3	—	—	—	—	—	—	—	—	—
Penis (179·2) ..	46	—	—	33	64	29	45	54	70·5	—	—	—	—	—	—	—	—	—
Uterus (171–174) ..	—	—	—	—	—	—	—	—	—	70	62	136	67	53	69	74	89	62·7
Ovary and Fallopian tube (175·1, 175·2) ..	—	—	—	—	—	—	—	—	—	130	65	76	119	131	140	130	134	60·4
Vagina, vulva (176·1, 176·2)	—	—	—	—	—	—	—	—	—	80	50	33	81	73	78	75	89	70·5
Breast (170) ..	92	—	—	33	56	110	109	82	67·6	95	200	113	101	101	90	93	95	63·5
Kidney (180) ..	151	88	78	70	133	166	176	215	60·7	109	58	150	69	63	123	113	142	64·8
Bladder, urethra (181) ..	153	350	67	125	113	139	151	188	69·2	131	—	—	120	94	100	122	170	71·8
Skin (190, 191) ..	55	50	317	116	72	59	54	45	67·7	73	138	211	247	98	69	71	56	66·3
Scrotum (179·1) ..	48	—	—	—	33	44	56	56	69·9	—	—	—	—	—	—	—	—	—
Bones, except jaw (160, 196·0, 196·2) ..	69	61	50	60	51	74	74	96	57·4	63	74	33	36	43	41	72	107	61·4
Thyroid gland (194) ..	102	—	—	33	47	72	148	167	66·1	95	—	—	40	73	84	90	133	69·8
Hodgkin's disease (201) ..	153	94	173	180	161	144	175	200	47·7	122	56	158	116	136	154	126	115	52·5
Leukaemia and aleukaemia (204) ..	215	151	167	164	169	211	268	750	51·6	201	146	144	192	161	186	251	382	53·2
Neoplasms (malignant, be- nign, and unspecified) of brain and central nervous system (193, 223, 237) ..	130	96	97	102	125	163	209	123	49·1	119	95	82	93	112	157	165	77	50·3

The "all ages" mortality ratio as calculated in Table LXVII has fallen for all causes of death combined in both sexes, but to a greater degree in the case of women than men. For cancer as a whole the ratio has risen for men and fallen for women, but with cancer of the lung and bronchus excluded a comparable fall in the ratio has occurred in both sexes.

Apart from cancer of the lung, which registers the greatest increase in deaths in both sexes, the "all ages" mortality ratio since 1936-39 has increased at the following sites :

**Men :** Leukaemia, Hodgkin's disease, bladder and urethra, kidney, pancreas, and prostate.

**Women :** Leukaemia, bladder and urethra, ovary and Fallopian tube, Hodgkin's disease, pancreas, pharynx, and kidney.

With the exception of Hodgkin's disease and cancer of the kidney, each of these sites contributes at the present time more than a total of 1,000 deaths annually to the total cancer mortality.

The "all ages" cancer mortality ratio has fallen more than 20 per cent at the following sites :

**Men :** Jaw, lip, tongue, penis, scrotum, mouth and tonsil, skin, larynx, oesophagus, bones, intestine, rectum, and pharynx.

**Women :** Jaw, lip, bones, uterus, intestine, larynx, stomach and duodenum, skin, and rectum.

Of these sites only the following were responsible for more than a thousand cancer deaths in 1957 :

**Men :** Oesophagus, intestine, and rectum.

**Women :** Stomach and duodenum, intestine, rectum, and uterus.

Cancer of the liver and mediastinum also shows a considerable decrease in the mortality ratio, but here the fall can probably in part be accounted for by more accurate certification and a transfer from liver to the true primary site, and from mediastinum to lung.

Considering only mortality in adult life—from 25 years onwards—sites can be broadly classified into five groups according to the apparent changes in mortality at different age-groups. Mortality ratios, when based on very small numbers of deaths in the younger age-groups, have been omitted from the general pattern.

#### I. Where death rates have fallen at all adult ages.

Males	Females
Lip	Lip
Tongue	Stomach and duodenum
Mouth and tonsil	Intestine and rectum
Pharynx	Larynx and trachea
Bone (except jaw)	Vagina and vulva
Intestine and rectum	Jaw
Larynx and trachea	
Scrotum	

#### II. Sites where rates have fallen at all older ages but where a rise has been recorded between 25 and 44 years.

Males	Females
Oesophagus	Breast
*Skin	Uterus
Testis	*Skin
	Gall bladder and ducts

\*At these sites rates were small and the increases recorded did not exceed two per million at risk.



III. Sites where rates have fallen at adult ages below 65 but have risen at older ages.

Males	Females
Prostate	Bladder and urethra
Thyroid gland	

IV. Sites where rates have fallen below 75 years but risen at older ages.

Males	Females
Stomach and duodenum	Tongue
	Mouth and tonsil
	Oesophagus
	Bone (except jaw)
	Thyroid gland

V. Sites where rates have risen at all or nearly all adult ages.

Males	Females
Pancreas	Pharynx
Lung and bronchus	Pancreas
Kidney	Lung and bronchus
Bladder and urethra	Ovary and Fallopian tube
Hodgkin's disease	Kidney
Leukaemia	Hodgkin's disease
	Leukaemia

### Cancer of the lung and bronchus

In both sexes the largest recorded increase in mortality since 1936-39 is from cancer of the lung and bronchus. The "all ages" mortality ratio shows that the number of male deaths in 1957 was more than four times, and the number of female deaths more than double, the number expected if the 1936-39 rates had continued. In men the ratio increases from the age-group 35-44, where it is less than double the earlier rate, to the age-group 65 and over, where it is more than six times the 1936-39 rate. In women this age gradient is less distinct; between the ages of 45 and 74 the rates are a little more than twice, but from 75 years onwards three times, the earlier rates.

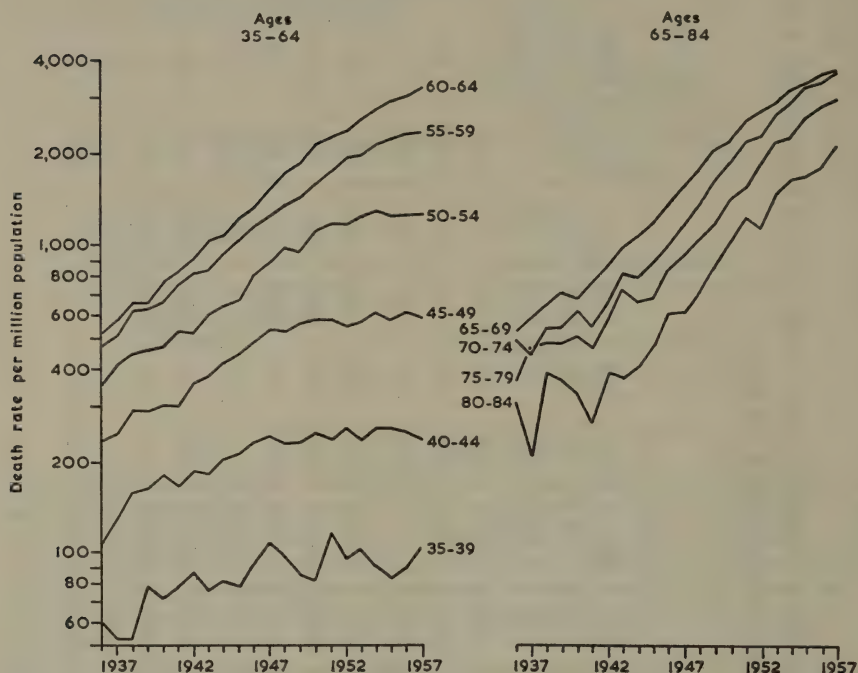
Table LXVIII (page 125) gives the male and female mortality rates by five-year age-groups for each year from 1950 to 1957. This table has some interesting features; firstly, that rates have risen in all age-groups from 50 years upwards but below that have remained relatively stable; and secondly, that above the age of 50 rates have increased more rapidly among the older men. Thus for the age-groups 55-59 and 60-64, the 1957 rates are about 50 per cent higher than the corresponding rates in 1950, while for the age-groups 70-74, 75-79, and 80-84 the rates have doubled, the increase in the age-group 65-69 being intermediate.

Table LXVIII. Cancer of lung and bronchus (I.S.C. Nos. 162, 163) : Death rates per million living, by sex and age,  
1950 to 1957, England and Wales

Age	Males								Females							
	1950	1951	1952	1953	1954	1955	1956	1957	1950	1951	1952	1953	1954	1955	1956	1957
30-	39	31	35	40	38	33	39	29	12	15	11	18	16	14	16	12
35-	82	115	97	103	92	84	90	103	29	30	25	26	28	27	29	28
40-	249	237	258	236	257	256	249	236	54	48	54	53	52	49	50	51
45-	585	585	558	575	608	584	616	589	75	78	83	88	95	92	86	113
50-	1,101	1,177	1,175	1,229	1,299	1,236	1,245	1,262	142	123	134	129	150	150	159	153
55-	1,600	1,751	1,965	1,990	2,116	2,221	2,301	2,333	190	188	208	191	204	229	217	246
60-	2,106	2,208	2,349	2,544	2,761	2,929	3,031	3,226	239	256	304	285	270	297	323	319
65-	2,142	2,515	2,703	2,882	3,191	3,352	3,570	3,668	319	336	334	346	359	371	361	350
70-	1,872	2,130	2,266	2,618	2,741	3,255	3,344	3,646	368	372	356	381	404	414	432	438
75-	1,405	1,553	1,855	2,126	2,210	2,579	2,811	2,949	378	384	462	462	417	405	463	471
80-	1,030	1,213	1,120	1,458	1,616	1,672	1,798	2,071	299	406	391	385	333	438	412	485
85 and over	515	705	1,046	868	838	1,000	1,288	1,384	241	271	324	263	373	275	428	364

Diagram 7 (below) has been drawn to illustrate these points, and shows the annual mortality rate in men at five-year age-groups since 1936. The rates have been plotted on a logarithmic scale, the effect of which is that the degree of the slope of each line is directly proportional to the rate of increase in mortality.

Diagram 7



Cancer of lung and bronchus—males: Death rates per million living, in five-year age-groups, 1936 to 1957, England and Wales

The rising mortality in the age-groups 40-44 and 45-49 appears to have ceased about 1947, and there is also a suggestion that among men aged 50-54 rates are becoming stabilised.

The rate of increase in mortality in the age-groups 55-59, 60-64, and 65-69 has, until the last four or five years, been remarkably constant. This is shown in the diagram by the almost straight lines which represent the rates at these age-groups. During the last five years the slope of each line has become less steep, indicating that at these age-groups mortality is not increasing as rapidly as heretofore. Moreover, the two lines representing the rates at age-groups 65-69 and 70-74 appear to be approaching each other, suggesting that if this present trend persists the peak of mortality will soon be transferred to the older age-group. Between 1936 and 1946 this peak was most often found in the age-group 60-64, whereas during the last 10 years it has invariably occurred in the 65-69 age-group. It appears unlikely that cancer of the lung will in the future show the same increases in mortality that have occurred during the past three or four decades, at least as far as men below 70 years of age are concerned, but it is not possible to make any prediction about men above that age.

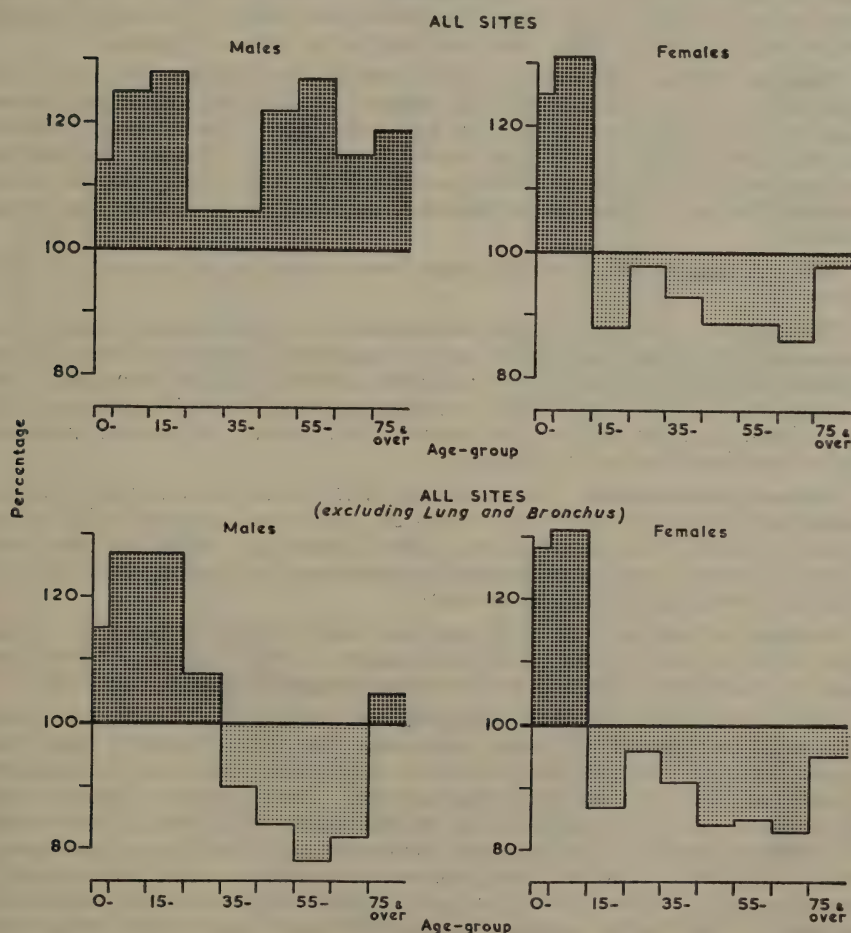


## Cancer of all sites

Compared with 1936-39, cancer mortality in 1957 had risen at all ages in males, but in females only among those below 25 years of age. Among children (under 15 years of age) the increase in both sexes is of similar magnitude, and is largely accounted for by the increased mortality from the leukaemias. From the age of 45 to 64 years the male cancer rate was in 1957 more than 20 per cent higher than in 1936-39, while the female rate was more than 10 per cent below. At age 65-74 the male rate showed a smaller increase and the female a greater fall, while for those aged 75 and over the male rate was nearly 20 per cent higher than, and the female 2 per cent below, the 1936-39 rate.

When cancer of the lung and bronchus is excluded from the analysis the picture is different (Diagram 8, below). Under the age of 35 the position is practically unchanged but between 35 and 74 years the male rates in 1957 are considerably below those of 1936-39, falling to 78 per cent in the 55-64 age-group but rising to 105 per cent at 75 years and over. Exclusion of lung cancer

**Diagram 8**



Cancer at all sites, and at all sites except lung and bronchus; Mortality expressed as a percentage of the 1936-39 experience, by sex and age, 1957, England and Wales

affects the female rates less, but between 45 and 74 years the 1957 rates are nearly 20 per cent lower, and 5 per cent lower at 75 and over. While it is possible that without the increased incidence of cancer of the lung many who died from that disease would have survived only to die from cancer at another site, yet it seems probable that, without that increase, male mortality from all forms of cancer might stand at an appreciably lower level than it did in 1936-39, at least for men between the ages of 45 and 74.

The decreased incidence at earlier ages and a static or increased rate among older people can be explained by the interplay of several factors.

Such a result could be due to a decrease in the force of malignancy which would be apparent first at younger ages, but only reach its full effect in older ages at a late period in time. Postponement of death, whether due to improved forms of treatment or earlier recognition of the disease in a more treatable form, would similarly affect the death rates. An analysis of the changes in mortality at individual sites may suggest which factors are predominant.

**Lip, tongue, mouth and tonsil.** Improvement in male mortality is seen at all ages but more especially under the age of 75. Female mortality, which at these sites is but a fraction of the male, has shown less change in cancer of tongue, and mouth and tonsil, while rates have risen in the oldest age-group.

**Pharynx.** Male mortality has fallen considerably between the ages of 55 and 74 but little beyond that age. In women there has been little change below the age of 65, but mortality has risen above that age. The mean age at death for men is nearly four years higher than that for women. It is possible that this is connected with postcricoid cancer and the Patterson Kelly syndrome, which are more frequent in women and occur at an earlier age than do other pharyngeal cancers.

**Jaw.** A notable fall in mortality has been recorded at all ages and in both sexes.

**Oesophagus.** Mortality in men has declined at all significant age-groups, but proportionately least among those aged 75 and over. Among women a fall is recorded at early ages, while at 75 and over there has been an appreciable rise. Considering the low survival rate following treatment of oesophageal cancer, it is probable that the fall in male rates is the reflection of reduced incidence rather than improvement in therapy.

**Stomach and duodenum.** Under the age of 75, female mortality has fallen to about two-thirds of what it was in 1936-39, but above that age the fall is less than one-tenth. Male mortality has fallen to nearly one-half in the age-group 35-44 but rather less in each succeeding age-group, until among those aged 75 and over mortality has risen 12 per cent.

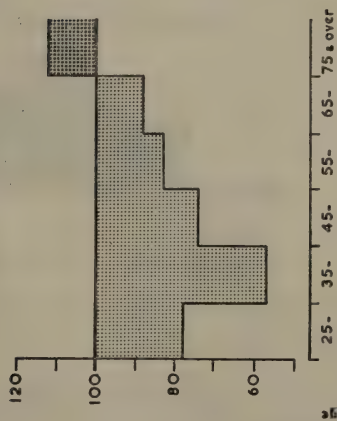
**Intestine and rectum.** In both men and women mortality has fallen at all ages but to a greater extent among those under 75 years of age. At both sites male mortality has fallen slightly more than female (Diagram 9, page 129).

**Liver, gallbladder and ducts, pancreas, and peritoneum.** Changes at these sites must be regarded with some suspicion. The fall in mortality from liver cancer is probably due, at least in the main, to better certification and consequent transfer of deaths to their proper primary site. The incidence of cancer of the peritoneum, and to a lesser extent of the gallbladder and ducts, is so low that the changes recorded may be merely chance variations and not indications of any regular trend. Cancer of the pancreas, which shows an increased mortality over the age of 35 years in both sexes, is relatively uncommon and not easy of diagnosis. The regular increase in mortality over recent years refutes the possibility that this may be a chance variation, but the possibility that it may be largely due to more accurate diagnosis and certification remains.

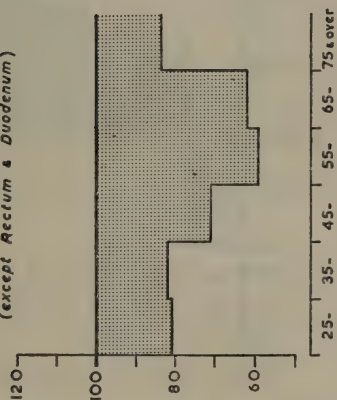
Diagram 9

MALES

Stomach & Duodenum



Intestine  
(except Rectum & Duodenum)

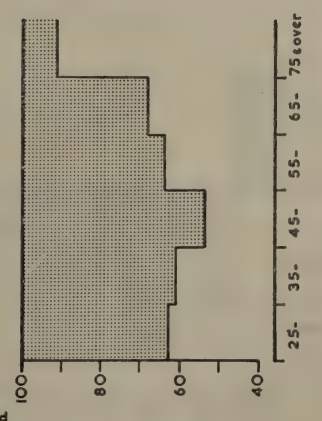


Rectum

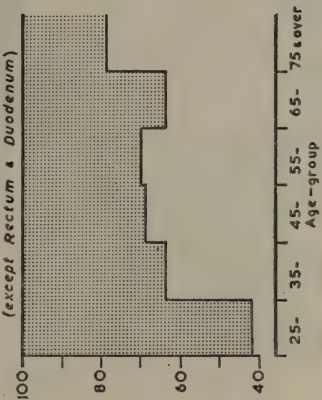


FEMALES

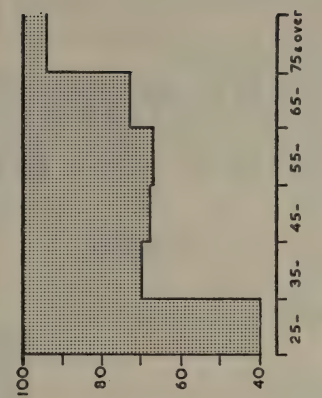
Stomach & Duodenum



Intestine  
(except Rectum & Duodenum)



Rectum



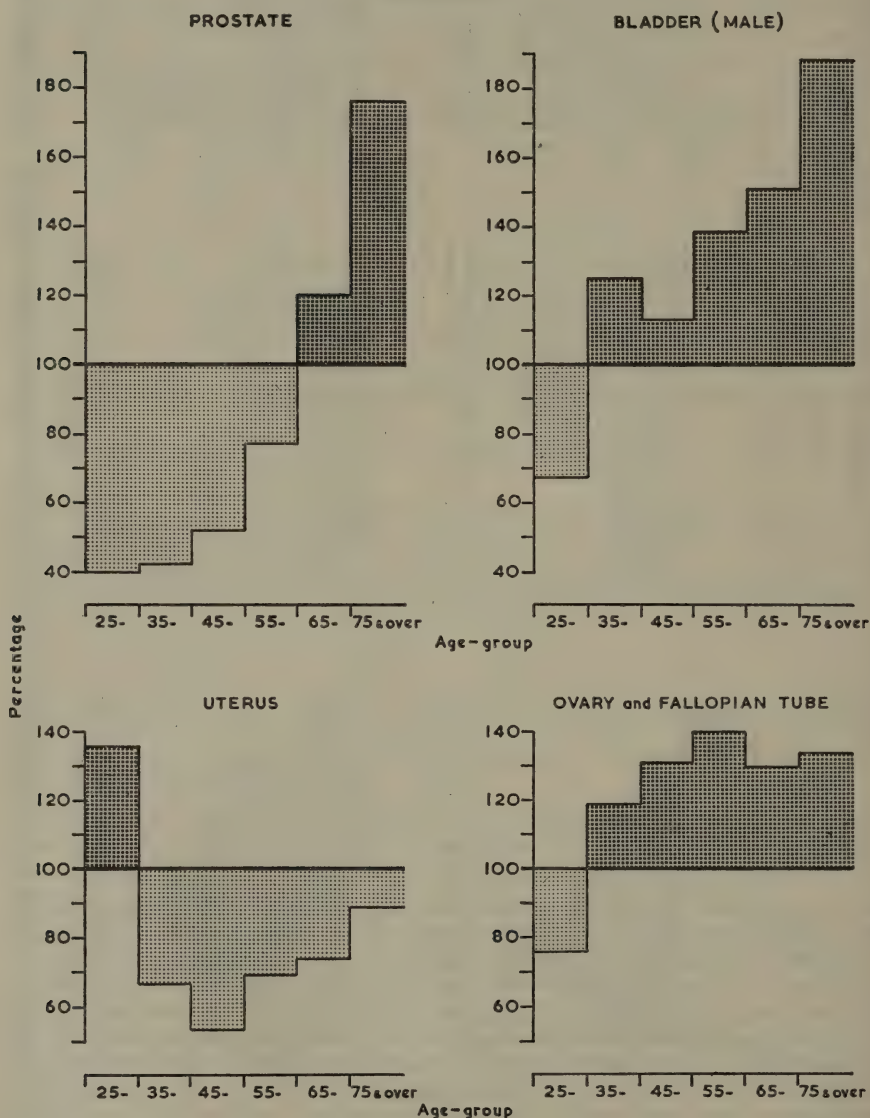
Cancer at certain sites : Mortality expressed as a percentage of the 1936-39 experience, by sex and age, 1957, England and Wales



If all forms of cancer of the digestive system are included under one head, male mortality below the age of 75 was in 1957 nearly 30 per cent below that in 1936-39, while female mortality had fallen about one-third. For those aged 75 and over male mortality had fallen about 4 per cent and female mortality about 13 per cent.

In women the mean age at death from the different forms of cancer of the digestive tract, with the small exception of hepatic cancer, is very close to 70 years. In men for cancer of the oesophagus, intestine and rectum, it is about 69 years, but for cancer of the stomach, gallbladder, pancreas, and liver the

Diagram 10



Cancer at certain sites: Mortality expressed as a percentage of the 1936-39 experience, by age, 1957, England and Wales

mean age is some 2 to 2½ years earlier. Cancer of the larynx and trachea shows a fall at all ages proportionately greater in the case of men than women, and in men under 75 years, and women under 65 years, greater than at older ages.

Cancer of the prostate (Diagram 10, page 130) is a disease of later life, the rate of mortality rising more steeply with age than that of cancer at any other site. The mean age at death, 74·6 years, is higher than that for any other important form. Mortality has fallen below the age of 65 but risen by 20 per cent in the subsequent decade, and by 76 per cent among those aged 75 years and more. Cancer of the testis on the other hand is relatively uncommon at older ages, the mortality varying little from the age of puberty onward. Such differences as are shown in Table LXVII are of little significance, and are most probably due to chance variations. Cancer of both penis and scrotum show a remarkable decline in mortality at all ages. Though they are both relatively unimportant as causes of death, the steady decline in mortality over recent years leaves no doubt that this decreased mortality is real.

Among cancer of the female organs only cancer of the ovary and Fallopian tube shows a consistent increase in mortality. The deaths in 1957 were 30 per cent higher than if the 1936–39 rates had been maintained, and mortality had increased at all age-groups from 35 years upwards. Mortality from cancer of the uterus had fallen in 1957 in all age-groups except between 25 and 34, where a 36 per cent rise was recorded (Diagram 10). The decline was greatest in the age-group 45–54, where it was 47 per cent below the 1936–39 rate. At older age-groups the fall was less pronounced, until among those aged 75 and over it amounts to but 11 per cent. Carcinoma of the breast showed comparatively little change—a slight “all ages” fall was recorded—the lowered mortality being confined to women past the age of 55 years.

Cancer of the kidney and bladder in 1957 recorded an increased mortality in both sexes but proportionately more in men, the greatest increase being found in both sexes in the older age-groups. In men aged 75 and over the rate had risen to 215 per cent in cancer of the kidney and 188 per cent in cancer of the bladder and urethra, and in women at corresponding ages to 142 per cent and 170 per cent of the 1936–39 rates.

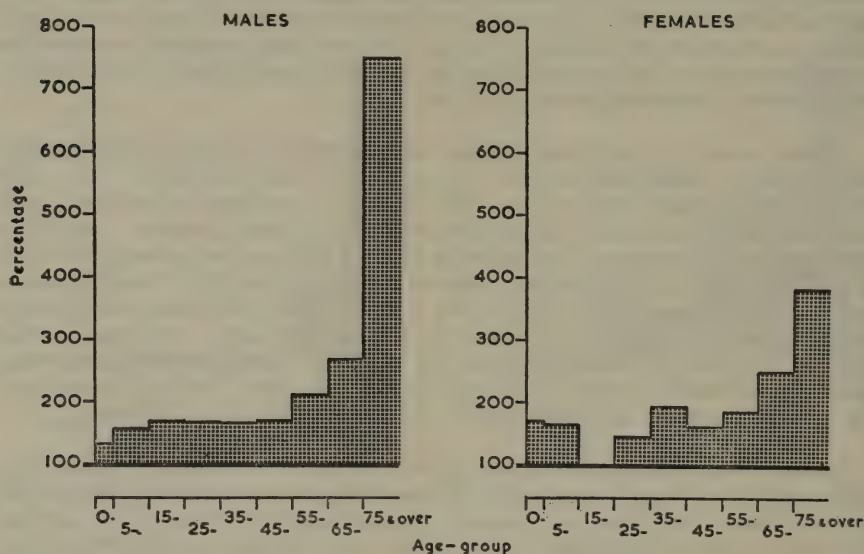
Mortality from leukaemia and aleukaemia is appreciable in childhood and adolescence as well as in later life, and an extended version of Table LXVII showing the mortality ratio at each age-group (1957 as a percentage of 1936–39) is given below.

	0–	5–	15–	25–	35–	45–	55–	65–	75 and over
Male .. ..	130	156	170	167	164	169	211	268	750
Female .. .	169	164	100	144	192	161	186	251	382

The death rate in males has risen at each age-group, and in women at each age-group except 15–24. Below the age of 55 in both sexes the 1957 rates are less than double those in 1936–39, and in men the increase has been of approximately the same magnitude at all age-groups. In both sexes the increase is proportionately much greater in the two older age-groups, especially among men aged 75 and over, where it is now more than seven times what it was in 1936–39 (Diagram 11, page 132). Table LXIX (page 133) shows the trend of mortality from the various types of leukaemia from 1950–57. This is given

separately for each sex and in two age-groups 0-14 and 15 years and over. The individual types of leukaemia were not separately classified in the statistics prior to 1950, but since that date the myeloid form has made much the largest contribution to the increased mortality from leukaemia as a whole in the older age-group. Compared with 1950 the 1957 adult male death rate for myeloid leukaemia is 11.1 per million, or 51 per cent, higher, while the female is 6.6 per million, or 32 per cent, higher, while for leukaemia as a whole the male increase is 16.9 per million, or 33 per cent, higher, and the female 13.5 per million, or 35 per cent, higher.

Diagram 11



Leukaemia and aleukaemia: Mortality expressed as a percentage of the 1936-39 experience, by sex and age, 1957, England and Wales



**Table LXIX. Leukaemia and aleukaemia : Death rates per million living, by sex, at ages 0-14 and 15 and over, 1950 to 1957, England and Wales**

			Ages 0-14		Ages 15 and over	
			Males	Females	Males	Females
<b>Leukaemia and aleukaemia (I.S.C. No. 204)</b>						
1950	..	..	31·5	30·1	51·6	38·8
1951	..	..	36·6	31·3	49·9	44·1
1952	..	..	42·1	30·0	55·3	44·2
1953	..	..	38·2	31·7	57·1	47·1
1954	..	..	35·7	26·1	59·3	49·2
1955	..	..	29·6	32·3	65·9	46·4
1956	..	..	34·8	33·1	64·2	50·7
1957	..	..	33·9	27·6	68·5	52·3
<b>Lymphatic leukaemia (I.S.C. No. 204·0)</b>						
1950	..	..	15·3	17·4	20·9	12·8
1951	..	..	21·5	16·8	20·0	13·6
1952	..	..	18·8	12·3	21·7	12·6
1953	..	..	18·2	12·0	21·2	14·2
1954	..	..	17·1	9·9	23·2	16·7
1955	..	..	10·9	16·3	26·3	14·0
1956	..	..	16·7	15·9	23·4	15·5
1957	..	..	19·4	11·2	24·5	15·1
<b>Myeloid leukaemia (I.S.C. No. 204·1)</b>						
1950	..	..	10·6	6·8	21·7	20·4
1951	..	..	9·7	9·7	21·8	23·8
1952	..	..	9·2	6·9	25·0	23·8
1953	..	..	8·5	8·3	26·6	24·8
1954	..	..	5·5	5·6	27·3	24·9
1955	..	..	7·2	7·6	29·3	25·2
1956	..	..	11·5	11·1	29·2	25·7
1957	..	..	8·6	10·2	32·8	27·0
<b>Acute leukaemia, unspecified type (I.S.C. No. 204·3)</b>						
1950	..	..	2·8	4·0	1·8	0·9
1951	..	..	3·2	3·1	1·8	1·8
1952	..	..	11·6	8·5	2·0	1·8
1953	..	..	9·7	8·9	1·8	1·9
1954	..	..	10·4	9·3	1·8	1·6
1955	..	..	9·2	6·5	3·0	1·2
1956	..	..	4·0	2·8	2·8	2·1
1957	..	..	3·6	4·6	3·2	2·8
<b>Monocytic leukaemia (I.S.C. No. 204·2) at all ages</b>						
			Males		Females	
1950	..	..	4·5	3·0		
1951	..	..	3·9	2·7		
1952	..	..	4·1	3·8		
1953	..	..	4·7	4·2		
1954	..	..	4·7	3·6		
1955	..	..	4·3	4·0		
1956	..	..	5·5	4·8		
1957	..	..	4·8	4·8		

Table LXX. Cancer (I.S.C. Nos. 140-205) : Sex and age specific death rates per million living from cancer at various sites, and the percentage of mortality at each site to "all sites", 1957, England and Wales

Males

I.S.C. No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140	Lip ..	35	—	1	—	1	3	9	54	178	468	698	1.5
141	Tongue ..												
142	Salivary gland ..												
143	Floor of mouth ..												
144	Other parts of mouth and mouth unspecified ..												
145	Oral mesopharynx ..	24	1	1	3	1	4	15	41	135	211	337	1.0
146	Nasopharynx ..												
147	Hypopharynx ..												
148	Pharynx unspecified ..												
150	Oesophagus ..	61	—	—	0	1	8	39	119	322	646	709	2.6
151	Stomach ..	369	—	—	1	16	64	311	901	1,893	3,095	2,930	16.0
152	Small intestine, including duodenum ..	180	—	0	2	12	40	112	326	889	2,034	2,488	7.8
153	Large intestine, except rectum ..												
154	Rectum ..		—	—	1	7	20	83	274	773	1,575	1,663	6.2
155	Biliary passages and liver (stated to be primary site) ..		1	—	0	1	6	19	73	133	204	151	1.1
157	Pancreas ..	87	—	—	0	3	15	76	218	471	656	709	3.8
161	Larynx ..	31	—	—	0	1	3	17	74	163	291	337	1.3
162	Trachea, bronchus and lung, specified as primary ..	759	1	0	4	20	169	915	2,724	3,658	2,655	1,384	32.8
163	Lung and bronchus, unspecified as to whether primary or secondary ..												
170	Breast ..	3	—	—	—	—	0	2	10	17	24	47	0.1
177	Prostate ..	161	1	—	0	0	2	14	150	929	2,558	3,302	6.9
178	Testis ..	8	1	1	8	14	12	6	8	14	17	12	0.3
179	Other and unspecified male genital organs ..	6	—	—	—	—	1	5	9	32	85	58	0.3
180	Kidney ..	33	11	2	1	2	8	41	96	141	156	81	1.4
181	Bladder and other urinary organs ..	95	1	0	1	1	11	52	203	496	997	1,209	4.1

190	Skin (malignant melanoma)	21	1	—	1	6	7	13	32	88	233	488	0.9
191	Skin (malignant neoplasm)	41	15	10	13	19	39	77	118	68	19	12	1.8
193	Malignant neoplasm of brain and other parts of nervous system .. .. .	4	—	—	—	1	1	3	8	27	31	23	0.2
194	Thyroid gland .. .. .	3	6	2	0	1	3	4	8	3	7	—	0.1
195	Other endocrine glands .. .. .	22	4	5	13	8	10	18	47	70	134	221	1.0
196	Bone (including jawbone)	12	2	1	1	3	5	14	32	47	61	70	0.5
197	Connective tissue .. .. .	22	5	6	8	8	12	31	50	81	80	58	1.0
198	Peritoneum .. .. .	27	—	5	18	28	32	37	48	50	54	47	1.2
199	Mediastinum .. .. .	4	4	0	—	2	2	6	10	7	14	—	0.2
200	Secondary and unspecified malignant neoplasm of lymph nodes .. .. .	12	1	—	—	1	6	15	42	55	41	58	0.5
201	Lymphosarcoma and reticulosarcoma .. .. .	60	46	28	27	24	31	47	110	194	318	267	2.6
202	Hodgkin's disease .. .. .	0	—	—	—	0	—	1	1	1	5	—	0.0
203	Other forms of lymphoma (reticulosis) .. .. .	62	2	2	3	4	19	51	162	297	442	488	2.7
204	Multiple myeloma (plasmocytoma) .. .. .	2,312	100	64	109	185	534	2,035	5,950	11,231	17,111	17,849	100.0
205	Leukaemia and aleukaemia .. .. .	63	25	16	18	29	56	119	173	120	43	23	
Others in 140-205	Mycosis fungoides .. .. .												
140-205	Remaining sites .. .. .												
193	Total .. .. .												
223	Malignant neoplasm of brain and other parts of nervous system .. .. .												
237	Benign neoplasm of brain and other parts of nervous system .. .. .												
	Neoplasm of unspecified nature of brain and other parts of nervous system .. .. .												



Table LXXI. Cancer (I.S.C. Nos. 140-205): Sex and age specific death rates per million living from cancer at various sites, and the percentage of mortality at each site to "all sites", 1957, England and Wales

Females

I.S.C. No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140	Lip .. .. .	14	1	—	—	1	3	7	21	42	105	185	0·7
141	Tongue .. .. .												
142	Salivary gland .. .. .												
143	Floor of mouth .. .. .												
144	Other parts of mouth and mouth unspecified .. .. .												
145	Oral mesopharynx .. .. .	15	—	1	—	1	6	15	33	54	61	71	0·8
146	Nasopharynx .. .. .												
147	Hypopharynx .. .. .												
148	Pharynx unspecified .. .. .												
150	Oesophagus .. .. .	41	—	—	—	0	5	27	61	152	315	375	2·2
151	Stomach .. .. .	258	—	—	1	11	42	119	392	977	1,967	2,380	13·7
152	Small intestine, including duodenum .. .. .	237	—	1	1	8	42	139	358	794	1,789	2,793	12·5
153	Large intestine, except rectum .. .. .												
154	Rectum .. .. .	98	—	—	—	4	22	65	152	357	666	1,043	5·2
155	Biliary passages and liver (stated to be primary site) .. .. .	36	1	—	0	1	6	18	64	147	230	239	1·9
157	Pancreas .. .. .	74	—	0	—	1	15	43	129	275	510	603	3·9
161	Larynx .. .. .	7	—	—	—	1	4	6	16	27	37	27	0·4
162	Trachea, bronchus and lung, specified as primary .. .. .	116	—	—	1	9	40	133	280	390	476	364	6·1
163	Lung and bronchus, unspecified as to whether primary or secondary .. .. .												
170	Breast .. .. .	370	1	—	2	32	196	538	767	1,029	1,535	2,228	19·6
171	Cervix uteri .. .. .	106	—	—	1	24	93	150	223	302	331	332	5·6
172	Corpus uteri .. .. .	52	—	—	0	2	7	45	133	179	277	201	2·8
173	Other parts of uterus, including chorionepithelioma .. .. .	11	—	—	1	3	3	12	25	31	42	76	0·6
174	Uterus, unspecified .. .. .												
175	Ovary, Fallopian tube and broad ligament .. .. .	124	1	1	4	12	73	210	315	325	330	277	6·5
176	Other and unspecified female genital organs .. .. .	22	1	—	—	0	5	13	34	80	161	239	1·



Compared with 1936-39, death rates from Hodgkin's disease were higher in 1957 in all age-groups from 25 upwards, the proportional increase being greater in men than in women (Table LXVII).

Mortality from new growths of the brain and central nervous system (I.S.C. Nos. 193, 223, 237) increased in both sexes from the age of 45 to 74 and also in older men, the greatest proportional increase being found in both sexes in the age-group 65-74.

Table LXVII also gives for 1957 the mean age at death for all causes, all sites of cancer, and each individual site. The "all causes" line shows the mean age at death of women to be 4.7 years greater than that of men, but for all cancer sites the difference is but 0.8 years. At the majority of sites common to both sexes the average age at death is higher in women than men, notably, cancer of the stomach (3.8 years), pancreas (3.1 years), kidney (4.1 years), and bladder (2.6 years). Cancer of the breast, ovary, and uterus, which account for more than one-third of all cancer deaths among women, tend to occur early in life, the mean age at death from cancer of cervix and ovary being about 60½ years while those for breast and corpus uteri were 63½ and 66½ respectively. In contrast with this, the mean age at death from cancer of the testis, which accounts for but 0.3 per cent of all male deaths from cancer, was 43.3 years, but that from cancer of the prostate, to which cause were assigned 6.9 per cent of male cancer deaths, was 74.6 years.

The proportion of deaths assigned to cancer at the various sites in 1957 was very different from that in 1939, especially among men, where, in 1939, lung cancer accounted for nearly 11 per cent of all cancer deaths, whereas in 1957 the proportion had risen to nearly 33 per cent. In consequence of this large increase at a single site, the proportion at the majority of other sites has fallen, but cancer of the bladder has increased from 3.3 to 4.1 per cent, and leukaemia from 1.7 per cent to 2.6 per cent. Less disturbance has been caused by cancer of the lung in women, where the proportion has risen only from 2.8 per cent to 6.1 per cent. The proportion of ovarian cancer has increased from 4.9 per cent to 6.5 per cent, and of pancreatic cancer from 2.9 per cent to 3.9 per cent, while for leukaemia the percentages are 1.4 and 2.5, and for bladder cancer 1.5 and 2.0. The two largest recorded falls, both in women, are uterine cancer (from 12.5 per cent in 1939 to 9.0 per cent in 1957), and gastric cancer (16.6 per cent to 13.7 per cent). The percentage distribution of cancer at individual sites in 1957 is shown in the last columns of Tables LXX and LXXI (pages 134-136).

### Cancer of the lung, and urbanisation

In the 1953 *Text Volume* of the *Statistical Review* (page 139) the standardised mortality ratios for cancer of the lung during the period 1950-53 were given for population aggregates in England and Wales. The figures are reproduced in Table LXXII (page 139) with the corresponding figures for the period 1954-57. Between the rural districts and the conurbations the gradient appears to have flattened in male mortality but to have grown steeper for women. In the earlier period the difference between the S.M.R.s in the rural areas and in the conurbations was for men 62 and for women 45, while over the last four years the difference was only 55 for men but 50 for women. The figures for the "Truly Rural" areas are less reliable for the period 1954-57 than in the earlier period since the present population in these small and scattered areas may have changed since the census year and the adjustments made may not fully reflect this change. The S.M.R.s in these areas still suggest a lower risk from lung cancer among those who live away from towns and industrial undertakings.



**Table LXXII. Cancer of lung and bronchus (I.S.C. Nos. 162, 163) : Standardised mortality ratios by sex in the urban and rural aggregates, and in selected rural ("truly rural") areas within regional groups, 1950-53 and 1954-57, England and Wales**

	Males		Females	
	1950-53	1954-57	1950-53	1954-57
<b>ENGLAND AND WALES</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Conurbations .. .. .	126	124	121	127
<i>Areas outside conurbations:</i>				
Urban areas with populations of 100,000 and over	111	109	101	94
Urban areas with populations of 50,000 and under 100,000 .. .. .	95	96	89	92
Urban areas with populations under 50,000 ..	84	86	86	79
Rural districts .. . . .	64	69	76	77
<i>"Truly rural" areas:</i>				
North of England .. .. .	48	48	67	64
Midlands and Eastern .. .. .	47	51	66	39
South of England .. .. .	49	62	67	71
Wales .. . . .	33	43	56	57

**The sex ratio in cancer**

In the 1953 *Text Volume* (page 160) a table was included giving for the years 1950-53 for males and females separately the deaths from cancer at certain sites; the number of deaths was given for each metropolitan borough and county borough and the aggregate of other urban and rural districts in each administrative county. It was suggested that if the production of cancer at any given site was influenced by some carcinogen which, either from industrial or social conditions, affected either men or women to a greater or lesser degree, such difference might be reflected in the ratio of male to female deaths. If in any area or group of similar areas, where local conditions brought one or other sex more closely into contact with such a carcinogen, it might be expected that such conditions would result in a lowering or raising of the sex ratio in comparison with the country as a whole. In this table deaths were recorded from some 235 localities and the resulting numbers were frequently too small to establish a valid local ratio. A similar table for the years 1954-57 is included in the present commentary (Table LXXIII, page 140) to increase the data available and minimise the effects of random fluctuations.

Table LXXIII. Deaths from cancer at certain sites, in the metropolitan and county boroughs, and in the urban and rural aggregates of the administrative counties of England and Wales, by sex, 1954-57

	Oesophagus (150)		Stomach (151)		Pancreas (157)		Nose, nasal cavities, middle ear and accessory sinuses (160)		Larynx (161)		Lung and bronchus (162, 163)		Kidney (180)		Bladder and other urinary organs (181)		Bone (including jaw bone) (196)		Lympho- sarcoma and reticulo- sarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES	5,354	3,808	31,556	24,663	7,343	6,437	491	369	2,693	726	60,860	10,047	2,786	1,774	7,887	3,437	1,438	1,177	1,871	1,473	2,079	1,169	4,895	4,198
London Administrative County	441	282	2,273	1,723	609	566	53	40	285	52	6,278	1,274	246	184	771	391	113	86	178	153	159	94	422	344
City of London	1	—	3	1	2	1	—	—	—	1	17	3	1	1	2	1	—	—	1	—	—	—	2	1
Battersea..	11	10	82	56	25	11	—	—	9	2	214	41	3	8	26	6	3	5	2	6	9	1	17	13
Bermondsey	6	1	42	30	13	13	1	2	3	—	120	14	2	5	10	4	—	—	4	3	1	1	6	5
Bethnal Green	5	7	44	31	8	10	1	1	6	1	98	25	4	6	18	9	1	3	2	1	1	2	7	
Camberwell	16	7	125	94	26	22	4	2	15	1	330	64	6	9	41	17	2	2	6	6	4	3	15	13
Chelsea	12	9	39	34	16	13	2	—	5	1	82	27	3	2	15	12	6	3	5	4	3	10	4	
Deptford..	11	6	53	48	18	8	—	1	10	1	192	25	8	9	18	7	2	3	3	—	3	11	8	
Finsbury	5	2	25	15	3	5	—	1	6	—	76	15	5	3	10	1	3	—	1	1	5	1	15	1
Fulham	13	9	63	51	18	19	1	—	15	3	249	49	10	5	25	9	1	2	5	4	6	1	16	10
Greenwich	8	10	57	35	11	11	1	—	9	1	161	25	10	6	15	11	5	2	5	5	4	3	19	12
Hackney	20	14	129	96	41	26	2	3	9	—	307	50	17	7	42	24	6	4	10	10	7	4	26	13
Hammer-smith	13	6	75	47	14	20	2	3	7	1	242	36	7	7	31	11	3	—	5	6	2	4	17	14
Hampstead	10	19	46	40	11	11	1	2	4	1	134	41	12	6	17	10	4	4	9	9	4	4	13	9
Holborn..	3	2	15	9	3	2	1	—	—	—	147	17	1	1	5	2	—	—	1	1	1	3	—	3
Islington	25	16	174	95	48	45	2	—	15	4	447	89	21	17	65	35	8	5	11	6	8	2	24	29
Kensington	19	18	81	86	24	30	4	2	7	2	230	78	10	8	27	22	5	7	12	12	14	8	10	12
Lambeth	25	16	127	116	33	35	5	3	15	2	391	73	11	12	37	24	3	7	14	14	13	9	19	16
Lewisham	16	19	169	90	41	45	4	2	12	5	375	65	20	6	49	24	8	9	18	14	13	2	25	28
Paddington	15	8	72	52	27	20	1	2	14	—	225	54	2	3	23	14	3	2	9	7	6	6	13	17
Poplar..	13	2	61	32	7	12	—	1	4	1	137	27	4	1	19	8	3	4	2	2	1	2	5	4
St. Marylebone	11	6	50	27	18	22	1	—	14	3	131	37	8	6	19	13	3	—	4	5	5	3	9	11
St. Pancras	23	8	71	82	20	23	1	1	8	2	300	59	12	6	29	16	2	4	4	4	13	4	12	19
Shoreditch	13	3	40	34	12	4	1	1	6	—	116	21	2	—	16	3	1	—	3	5	—	—	6	2
Southwark	17	5	78	59	21	21	1	1	8	3	214	29	5	6	29	14	6	—	5	2	6	4	10	7
Stepney..	29	10	86	51	22	18	3	2	14	1	214	31	8	4	31	3	3	2	3	7	4	3	18	13
Stoke Newington	5	6	34	33	6	10	—	—	5	—	73	17	3	3	13	3	—	2	3	1	4	5	9	9
Wandsworth	61	50	291	272	83	66	12	7	47	3	749	174	38	25	99	63	18	10	18	18	16	7	59	44
Westminster	15	5	44	34	11	18	—	—	7	2	174	44	4	3	13	9	8	2	10	5	10	5	25	9
Woolwich	20	8	97	73	27	25	2	3	11	6	235	44	9	6	27	16	6	2	12	5	4	7	21	14

County boroughs	1,671	1,082	10,199	8,111	2,227	1,915	123	119	939	232	21,054	3,212	815	528	2,562	1,070	483	385	553	402	640	352	1,436	1,285
Barnsley ..	7	2	49	38	5	8	—	—	4	3	62	7	5	3	12	4	2	3	—	2	3	1	5	—
Barrow-in-Furness ..	3	9	59	44	22	11	—	—	5	3	78	8	5	3	13	8	3	1	3	4	4	1	5	9
Bath ..	7	9	53	68	13	11	1	1	10	5	112	14	10	3	16	8	3	3	3	4	2	1	8	9
Birkenhead ..	27	14	117	68	22	22	2	—	14	5	223	37	15	7	27	9	6	4	4	3	7	3	11	16
Birmingham ..	129	65	746	604	155	146	5	—	82	5	1,729	270	66	52	223	70	51	32	51	38	45	18	128	189
Blackburn ..	15	16	112	84	24	21	1	1	4	6	184	25	10	5	13	7	3	2	—	2	1	3	12	12
Blackpool ..	27	16	115	123	39	36	2	2	12	4	235	52	11	9	30	17	7	7	7	4	9	5	14	19
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2	2	14	2	245	43	8	7	29	17	7	10	7	4	9	6	16	14
Bolton ..	17	15	124	109	30	20	2																	



Table LXXIII—continued

	Oesophagus (150)		Stomach (151)		Pancreas (157)		Nose, nasal cavities, middle ear and accessory sinuses (160)		Larynx (161)		Lung and bronchus (162, 163)		Kidney (180)		Bladder and other urinary organs (181)		Bone (including jaw bone) (196)		Lympho- sarcoma and reticulo- sarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Northampton ..	12	5	81	61	13	11	—	4	6	2	140	21	7	4	20	9	4	1	3	5	3	4	9	7
Norwich ..	9	4	97	85	23	18	4	2	8	4	143	25	11	8	26	12	7	2	7	6	7	12	7	
Nottingham ..	31	18	203	148	45	42	—	1	14	3	462	74	20	21	70	21	13	10	13	4	40	33	8	
Oldham ..	15	9	123	110	19	16	—	1	8	8	182	34	7	6	25	7	6	3	6	3	12	16	8	
Oxford ..	9	6	58	49	17	12	2	1	2	1	130	25	10	5	26	8	3	3	1	3	12	16	8	
Plymouth ..	32	16	149	81	43	22	—	1	16	6	242	32	12	5	39	17	11	7	39	3	15	20	20	
Portsmouth ..	23	14	182	116	42	28	—	2	14	3	325	49	12	7	44	6	15	13	11	10	28	20	9	
Preston ..	14	15	107	63	21	21	—	1	9	6	177	12	10	3	11	4	3	3	4	8	4	12	9	
Reading ..	12	12	74	42	15	18	1	1	8	1	161	25	6	1	26	11	2	1	6	2	5	2	2	
Rochdale ..	10	15	66	68	15	11	—	—	7	—	119	26	5	10	15	6	3	6	2	2	1	7	11	
Rotherham ..	10	5	51	35	10	7	3	—	5	1	120	8	8	3	16	7	2	3	1	4	2	7	7	
St. Helens ..	10	3	107	53	17	13	—	—	11	2	160	25	7	5	18	5	2	3	3	4	4	10	4	
Salford ..	24	16	135	107	27	27	3	4	10	8	363	52	8	2	25	13	10	6	3	2	19	13	9	
Sheffield ..	42	28	402	287	93	90	3	6	34	6	920	114	32	18	112	37	20	19	10	23	16	65	52	
Smethwick ..	10	1	51	58	6	4	—	—	3	—	96	16	7	4	15	3	3	9	6	2	8	10	10	
Southampton ..	18	18	117	112	32	26	1	1	13	5	290	47	16	7	30	12	4	4	11	8	5	28	17	
Southend-on-Sea ..	21	22	108	89	31	23	1	1	10	3	271	43	7	5	39	27	3	6	8	5	9	20	21	
Southport ..	9	14	58	61	23	28	1	1	5	3	152	25	5	1	15	6	7	3	4	6	5	12	12	
South Shields ..	17	7	109	92	17	12	—	—	7	1	162	20	8	5	22	3	4	7	4	5	2	13	6	
Stockport ..	23	11	130	97	29	28	2	2	7	1	248	42	2	5	20	10	7	7	3	7	2	11	9	
Stoke-on-Trent ..	42	15	243	188	52	30	—	2	13	7	401	53	15	12	35	16	6	5	5	6	10	6	29	
Sunderland ..	25	10	140	124	31	21	3	3	10	2	244	38	17	8	28	7	6	5	7	5	10	4	26	
Tynemouth ..	11	6	64	52	13	10	1	1	5	—	97	14	3	3	10	7	1	2	3	4	3	4	25	
Wakefield ..	5	3	57	35	6	12	—	—	2	—	66	9	5	1	10	4	5	1	2	3	3	3	6	
Wallasey ..	17	11	94	70	15	15	3	—	13	3	152	23	2	7	21	8	1	5	4	4	6	8	8	
Walsall ..	9	2	79	77	10	17	1	1	6	—	171	21	7	2	12	5	4	4	7	2	10	1	5	
Warrington ..	7	6	68	44	14	12	1	2	6	1	135	10	4	5	15	8	2	1	4	2	3	16	8	
West Bromwich ..	10	2	72	48	18	7	1	—	5	1	118	14	3	2	10	9	3	1	2	4	4	5	9	
West Ham ..	21	6	137	82	27	18	1	1	12	4	312	50	11	7	28	14	4	8	7	3	6	1	17	
West Hartlepool ..	6	4	62	39	6	6	1	—	1	—	90	10	—	5	14	6	2	1	2	1	4	8	11	
Wigan ..	8	5	46	57	9	6	1	—	6	2	100	9	3	3	3	6	1	2	3	3	3	7	4	
Wolverhampton ..	12	12	116	81	26	24	3	—	7	1	199	28	8	4	23	10	4	5	2	4	2	19	11	
Worcester ..	9	6	32	33	13	13	1	—	8	—	78	13	2	2	10	4	3	2	2	3	7	14	7	
York ..	9	9	87	55	24	15	—	—	4	—	129	18	13	7	18	7	3	1	5	1	2	14	12	



Table LXXIII—continued

	Oesophagus (150)		Stomach (151)		Pancreas (157)		Nose, nasal cavities, middle ear and accessory sinuses (160)		Larynx (161)		Lung and bronchus (162, 163)		Kidney (180)		Bladder and other urinary organs (181)		Bone (including jaw bone) (196)		Lympho- sarcoma and reticulo- sarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Hertfordshire .. {UD RD	37 31	39 20	284 96	220 80	77 25	61 32	7 1	3 1	20 8	6 2	601 255	97 47	38 12	19 9	84 33	40 16	9 3	13 2	17 16	15 10	24 7	14 2	55 34	41 21
Huntingdonshire .. {UD RD	10 3	4 22	23 22	21 24	7 6	8	—	—	3 1	—	28 38	4 4	2 2	—	6 4	1 4	1 4	1 2	2 3	1 3	—	—	1 4	1 1
Kent .. {UD RD	177 56	90 40	735 246	591 169	239 64	172 75	9 4	10 3	79 22	16 3	1,791 489	287 69	83 21	55 13	218 71	131 27	39 11	38 11	52 20	60 13	70 16	44 7	170 53	150 37
Lancashire .. {UD RD	214 38	156 36	1,390 212	1,189 159	302 62	277 38	27 4	20 3	118 12	46 10	2,413 313	395 57	101 13	65 13	307 49	128 22	73 8	34 13	47 35	98 20	49 10	178 31	158 27	
Leicestershire .. {UD RD	20 22	5 11	106 85	90 90	25 23	27 25	—	2 2	9 11	3 2	172 200	20 25	4 11	8 8	25 38	9 12	6 4	5 —	7 9	3 4	7 9	2 6	16 24	9 20
Lines. (Parts of Holland) {UD RD	3 4	6 5	18 46	25 22	6 8	6 6	—	—	2 6	1 4	39 42	8 9	4 3	—	8 18	2 5	—	1 —	1 —	1 —	1 1	3 5	8 8	4 4
Lines. (Parts of Kesteven) {UD RD	12 10	10 7	36 50	20 40	8 10	7 7	1	1	6 6	2 2	67 60	18 7	2 4	—	13 16	3 3	—	4 4	5 1	3 2	4 —	4 11	4 2	2 2
Lines. (Parts of Lindsey) {UD RD	20 15	11 11	104 92	75 52	29 24	24 15	2 1	4 2	9 3	2 —	180 118	41 20	9 6	6 3	21 36	6 10	5 4	1 1	7 3	8 6	3 1	7 16	10 10	16 234
Middlesex .. UD	221	171	1,315	1,088	388	340	26	11	116	27	3,604	682	166	93	405	193	49	50	120	103	116	69	250	234
Norfolk .. {UD RD	11 46	3 26	60 228	33 146	23 55	18 45	1 2	5	20	2 3	92 290	19 44	4 29	4 6	7 52	9 22	—	1 10	5 13	2 8	1 15	—	4 30	5 36
Northamptonshire .. {UD RD	13 18	5 12	106 104	72 75	30 16	17 25	2 2	1	6	1 —	145 162	25 23	6 8	6 4	20 30	10 7	2 2	8 4	6 7	7 4	3 2	4 10	7 10	11 7
Northumberland .. {UD RD	37 16	31 8	292 90	209 67	61 17	49 28	1 3	2	14	3 5	434 101	58 15	21 7	15 4	53 23	23 4	17 1	6 1	5 5	6 2	16 2	37 13	30 7	7 7
Nottinghamshire .. {UD RD	28 11	19 10	249 87	147 73	59 33	55 13	2 6	3	17	3 6	402 167	74 27	21 5	15 9	67 27	23 11	9 2	11 6	16 4	11 5	19 6	10 4	35 18	30 8
Oxfordshire .. {UD RD	4 22	4 6	31 66	20 54	9 9	11 20	—	1	1	1 —	58 137	7 24	9 9	1 6	4 22	3 12	1 4	1 2	—	—	3 4	—	6 13	4 16



Peterborough, Soke of..	{ UD RD	5 4	4	48 7	25 6	7 4	11 1	— 1	1 —	3 1	4 —	78 5	12 3	3 1	1 —	6 2	7 1	1 —	1 —	— —	2 1	— —	5 2	5 —
Rutland ..	{ UD RD	— 1	— 1	3 10	2 4	2 4	4 1	— —	1 —	— —	— —	9 11	1 4	— —	— —	2 2	— —	1 —	— —	— —	— —	1 —	1 —	
Shropshire	{ UD RD	23 19	14 17	85 81	70 68	27 19	19 27	1 1	3 1	9 9	4 2	163 111	15 15	9 5	5 15	23 15	11 9	7 8	2 3	9 4	6 1	2 1	15 13	
Somerset	{ UD RD	24 43	17 27	165 189	153 139	40 49	30 34	4 3	6 1	19 24	5 2	267 241	45 17	17 12	6 42	42 14	14 10	8 4	8 9	10 11	9 8	3 8	23 25	
Southampton	{ UD RD	41 29	37 38	212 147	171 115	66 42	55 33	6 2	1 1	20 13	6 1	447 337	84 60	25 16	17 13	68 45	26 18	12 7	11 6	12 12	11 10	10 31	55 25	
Staffordshire	{ UD RD	63 23	35 14	499 397	397 112	84 27	87 24	7 —	5 2	38 7	10 4	813 197	85 30	17 6	17 25	97 25	39 10	19 8	17 9	20 11	19 17	76 14		
Suffolk, East	{ UD RD	13 15	12 8	69 72	51 58	17 24	22 13	2 3	— 2	5 2	— 2	114 108	24 24	9 11	4 6	12 21	11 8	3 5	3 5	6 5	4 5	5 11	10 6	
Suffolk, West	{ UD RD	5 11	4 12	24 47	21 36	5 12	4 8	— —	1 1	1 7	1 —	60 60	6 11	4 8	3 10	5 9	5 9	— —	2 3	1 4	2 2	7 9	1 6	
Surrey ..	{ UD RD	131 16	123 15	631 75	590 53	209 33	210 18	1 1	7 10	71 10	17 3	1,943 178	330 44	90 12	62 2	231 22	109 6	35 4	25 4	61 7	40 7	33 16	122 22	
Sussex, East	{ UD RD	26 19	32 23	107 119	130 91	46 32	47 37	3 1	3 1	19 9	6 2	267 245	70 43	14 10	6 31	47 18	26 6	10 6	8 9	16 13	6 7	25 13		
Sussex, West	{ UD RD	34 19	17 15	104 101	48 75	49 37	4 34	4 6	2 2	8 8	3 3	302 206	82 47	13 17	14 9	39 35	26 10	8 3	5 8	11 7	9 8	22 33		
Warwickshire	{ UD RD	51 23	34 8	192 99	143 77	46 29	48 24	6 1	3 1	16 9	6 2	396 292	69 29	20 11	14 33	60 10	20 9	9 3	10 9	21 7	15 5	7 20	39 11	
Westmorland	{ UD RD	8 2	10 4	26 26	26 29	6 6	3 2	1 —	— —	1 —	2 —	32 19	8 3	1 3	2 5	3 2	5 5	1 4	1 2	4 1	1 4	1 2	3 3	
Wight, Isle of	{ UD RD	13 4	6 3	54 12	44 7	12 6	12 4	— —	— —	5 —	— —	94 20	13 6	7 2	6 1	17 6	8 2	1 —	— —	4 —	2 1	7 9		
Wiltshire	{ UD RD	30 23	15 16	134 109	80 75	32 23	24 25	2 1	4 1	11 11	5 1	211 181	17 21	17 7	12 5	36 26	17 14	11 10	3 4	7 8	10 5	24 19	21 16	
Worcestershire ..	{ UD RD	22 11	22 15	181 71	155 75	39 23	25 18	2 1	1 6	15 6	2 2	371 107	42 24	15 3	12 14	33 13	13 2	9 1	6 5	17 7	9 3	36 7	31 8	
Yorkshire, East Riding	{ UD RD	12 12	12 7	61 61	66 49	24 16	14 —	2 —	1 5	8 5	1 2	159 101	26 17	9 6	11 20	17 13	7 5	4 5	2 5	6 2	7 2	12 12	8 12	
Yorkshire, North Riding	{ UD RD	24 21	13 15	176 92	140 77	39 33	32 21	3 9	2 3	13 3	3 —	246 131	43 17	20 11	9 8	24 17	17 4	3 7	5 6	7 3	8 5	1 21	22 14	
Yorkshire, West Riding	{ UD RD	113 38	92 33	939 310	689 208	183 48	158 32	9 5	10 4	61 20	16 7	1,346 363	222 57	72 14	48 8	216 61	79 23	42 11	26 15	37 13	52 19	30 11	115 36	

Table LXXXIII—continued

	Oesophagus (150)		Stomach (151)		Pancreas (157)		Nose, nasal cavities, middle ear and accessory sinuses (160)		Larynx (161)		Lung and bronchus (162, 163)		Kidney (180)		Bladder and other urinary organs (181)		Bone (including jaw bone) (196)		Lympho- sarcoma and reticulo- sarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Anglesey .. {UD RD	3 6	3 9	19 49	19 44	2 5	1 7	—	—	1 1	—	23 28	2 5	1 4	2 1	2 7	5 1	1 1	—	—	2 2	—	—	2 3	
Brecknockshire ... {UD RD	2 12	3 5	14 46	14 27	1 6	2 5	—	1	2 2	—	18 35	2 6	3 2	—	4 1	—	3 1	—	2 1	—	1 1	1 3		
Caernarvonshire .. {UD RD	19 12	14 11	91 95	85 67	5 7	7 5	—	—	2 4	5 4	92 51	18 6	8 6	5 4	10 7	5 1	2 1	4 1	2 2	4 4	—	10 6	7 4	
Cardiganshire .. {UD RD	8 5	4 11	20 67	23 42	3 8	2 6	—	—	1 2	—	25 22	3 7	3 3	—	2 5	1 4	—	2	2 2	—	—	1 4	—	
Carmarthenshire .. {UD RD	15 9	15 13	86 114	73 103	12 15	10 17	2 3	1	—	7	106 83	11 7	1 2	—	18 11	9 3	2 3	1 1	—	6 3	—	2 6	5 9	
Denbighshire .. {UD RD	17 25	16 12	88 119	67 88	18 12	10 11	—	—	2 4	3	82 99	18 9	2 6	2 3	17 10	2 3	4 2	4 2	1 7	4 2	1 1	8 10	12 6	
Flintshire .. {UD RD	9 15	10 4	66 72	57 50	16 12	14 8	1 1	—	6 2	6 2	94 96	8 7	3 3	5 4	12 11	3 1	3 —	7 3	2 3	3 4	1 2	10 7	3 7	
Glamorganshire.. {UD RD	81 23	61 15	526 177	352 120	86 21	62 26	8 3	6 1	30 17	5	540 253	58 18	28 11	18 5	73 38	22 8	21 12	11 6	22 9	10 11	28 20	48 21	30 19	
Merionethshire .. {UD RD	3 5	5 8	26 36	28 15	5 3	3 3	—	—	—	1	21 15	1 5	1 2	—	5 1	2 1	—	—	—	1	—	2 —	2 —	
Monmouthshire.. {UD RD	29 8	24 1	274 50	170 29	44 10	39 2	1 1	4 —	16 4	9	284 56	23 7	18 2	9 2	25 5	15 1	9 2	8 2	13 —	4 —	14 2	20 8	21 7	
Montgomeryshire .. {UD RD	3 6	2 2	15 36	17 20	3 3	4 2	—	—	—	1	12 21	4 3	2 2	—	1 3	—	1 1	—	—	—	1 —	2 6	4 4	
Pembrokeshire .. {UD RD	6 5	4 7	39 56	28 41	7 7	8 7	—	—	6 2	—	50 28	10 6	4 3	—	5 4	5 3	1 4	1 4	2 4	3 2	5 —	7 3	2 3	
Radnorshire .. {UD RD	— 2	— 1	7 14	4 6	2 4	1 —	—	—	—	—	4 6	2 —	—	—	—	2	—	1	—	—	—	—	—	

In Table LXXIV (page 148) a comparison is made of the sex ratio in the two four-year periods for deaths from cancer at each of the selected sites in England and Wales as a whole, in the aggregates of county boroughs, other urban and rural districts, and the London Administrative County with Middlesex. (In this table "sex ratio" means the ratio of the male to female death rates [all ages]; that is to say, allowance is made for the varying proportions of males and females at risk in the different categories.) At most of the selected sites there has been very little change in the sex ratio for England and Wales as a whole, but a big difference is recorded in oesophageal cancer and in lymphosarcoma, while lesser differences occur in the case of lung and laryngeal cancer. These are explained by changes which have occurred in the male and female death rates over the two four-year periods as is shown below :



Table LXXIV. Sex ratios for cancer at certain sites, in the aggregate county boroughs, urban districts (distinguishing combined London Administrative County and Middlesex), and rural districts, 1950-53 and 1954-57, England and Wales

*These sex ratios are the ratios of the male to female death rates (all ages)*

Intl. Classn. No.	Site	England and Wales		Aggregates of :—						London Admin. County and Middlesex	
				County boroughs		Other urban districts (except London Admin. County and Middlesex)		Rural districts			
		1950-53	1954-57	1950-53	1954-57	1950-53	1954-57	1950-53	1954-57	1950-53	1954-57
150	Oesophagus	1.58	1.30	1.65	1.40	1.54	1.20	1.50	1.36	1.62	1.28
151	Stomach	1.17	1.18	1.14	1.14	1.14	1.15	1.38	1.39	1.06	1.12
157	Pancreas	1.05	1.05	1.03	1.05	1.03	1.02	1.21	1.20	0.93	0.96
160	Nose, nasal cavities, middle ear, and accessory sinuses..	1.22	1.23	1.17	0.93	1.23	1.29	1.37	1.56	1.08	1.28
161	Larynx ..	3.87	3.43	4.18	3.66	3.51	2.96	3.00	3.34	5.72	4.45
162, 163	Lung and bronchus ..	5.00	5.60	5.27	5.93	4.83	5.63	5.06	6.10	4.54	4.43
180	Kidney ..	1.34	1.45	1.23	1.40	1.30	1.41	1.70	1.78	1.33	1.30
181	Bladder and other urinary organs ..	2.17	2.12	2.17	2.16	2.12	2.03	2.61	2.61	1.84	1.76
196	Bone (including jaw bone) ..	1.24	1.13	1.21	1.13	1.18	1.13	1.45	1.17	1.17	1.04
200	Lymphosarcoma and reticulosarcoma ..	1.40	1.17	1.30	1.24	1.32	1.09	1.93	1.39	1.30	1.02
201	Hodgkin's disease ..	1.57	1.64	1.68	1.64	1.48	1.65	1.65	1.73	1.46	1.48
204	Leukaemia and aleukaemia ..	1.04	1.08	1.05	1.01	1.00	1.04	1.20	1.32	0.93	1.02

## DISEASES OF THE CIRCULATORY SYSTEM

During 1957 there were 188,630 deaths assigned to diseases of the circulatory system and a further 73,669 assigned to vascular lesions affecting the central nervous system, making 262,299 deaths in all, or 51 per cent of all deaths in England and Wales.

Table LXXV (page 150) shows crude death rates per million living from some individual diseases of the circulatory system during 1941 to 1957. The interpretation of this table is made more difficult by the changes in diagnostic fashion that have been taking place during this period but the following points are worthy of comment.

There is little doubt that the decline in the death rate from rheumatic fever and chronic rheumatic heart disease is a real one, and has been brought about by improved social conditions, and by improved prophylaxis and treatment of rheumatic fever. The same may be said of the decline in deaths assigned to acute and subacute endocarditis, although it is known that the number of deaths assigned to endocarditis has borne little relation to the number of deaths in which the disease has been present. The reason for this is that subacute bacterial endocarditis usually occurs when there is a pre-existent heart lesion and the principle of certification of cause of death in accordance with the underlying cause often results in assignment to the heart lesion, i.e. the occurrence which initiated the train of events leading to death. In 1951, in an investigation of a sample of death certificates, there were 26 deaths assigned to acute and subacute endocarditis, and a further 39 in which the disease was mentioned as a complication or contributory condition.\*

Similarly, with hypertension the number of deaths assigned to the disease gives no indication of the number of cases in which hypertension was implicated in the death and mentioned on the certificate, for, by the coding rules of the Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death, certificates in which there was mention of coronary artery disease or vascular lesions of the central nervous system as well as hypertension were always assigned to one of the first two conditions. In 1951, in the same investigation mentioned in the previous paragraph, out of 3,241 certificates resulting in assignment to arteriosclerotic (coronary) heart disease, there was mention of hypertensive disease in 385 (12 per cent). Out of 4,161 certificates resulting in assignment to vascular lesions affecting the central nervous system, hypertensive disease was mentioned in 1,032 (25 per cent).†

The apparent rise in the mortality from coronary artery disease which has been taking place in recent years has excited great interest in medical and other circles, but it is very difficult to estimate how much of the rise is real. The evidence for some part of it being real, particularly among males, is very strong, but is based largely on sources other than those of vital statistics. The main statistical evidence is the failure of the death rate of the older males for all causes to fall as rapidly as that of females of equivalent age-groups. In addition, the comparative mortality index (C.M.I.) for diseases of the circulatory system has shown a rise in males of roughly 10 per cent in the last 20 years, while that for females has fallen by the same amount. There has been a rise of over 10

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\**The Registrar General's Statistical Review, 1954, Part III, Commentary*, pp. 157-159. H.M.S.O. London, price 8s. net.

†*The Registrar General's Statistical Review, 1951, Text Volume*, pp. 260-265. H.M.S.O. London, price 10s. net.

Table LXXV. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, 1941-46 and 1947 to 1957, England and Wales

Abbr- viated List No.	I.S.C. No.	1941-46	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
B.24	400-402	24	18	18	15	12	8	7	7	7	5	5	4
B.25	410-416	25	19	20	17	14	9	8	7	6	5	5	4
B.26	420	244	203	181	181	201	194	164	157	148	140	140	138
		290	272	257	270	306	298	247	240	237	232	223	225
		991	1,245	1,264	1,453	1,640	1,757	1,847	1,837	1,991	2,069	2,181	2,208
		421	586	652	765	885	937	982	995	1,066	1,143	1,204	1,226
		191	132	106	112	72	62	71	69	78	73	73	79
		147	114	97	95	54	45	61	57	62	58	57	68
		1,929	1,890	1,559	1,728	1,555	1,648	1,388	1,312	1,286	1,256	1,186	1,043
		1,823	2,026	1,772	2,071	1,965	2,082	1,733	1,707	1,626	1,647	1,597	1,422
B.27	430	24	16	14	12	11	10	9	9	9	10	9	9
		20	11	10	10	7	7	6	6	5	5	5	6
		125	103	86	107	111	149	146	160	180	186	189	210
		123	120	109	122	128	158	155	166	173	187	200	217
B.28, 29	431-434	338	375	351	389	445	476	427	436	444	446	432	406
		258	331	324	388	452	480	436	445	467	494	479	460
B.46 Pt.	450	271	279	239	259	269	287	252	247	248	247	242	220
		200	235	214	249	260	280	250	256	252	276	267	255
		8	11	11	14	15	16	13	18	19	22	21	22
		7	10	10	14	15	14	16	19	19	21	25	24
		56	49	50	54	47	45	58	61	67	72	79	85
		55	58	58	65	59	53	64	65	73	79	86	85
		4,201	4,320	3,870	4,325	4,378	4,652	4,384	4,313	4,447	4,525	4,559	4,425
		3,368	3,760	3,522	4,068	4,143	4,563	3,957	3,963	3,987	4,146	4,139	3,992
		0.98	0.96	0.97	1.07	1.09	1.16	1.08	1.06	1.08	1.09	1.10	1.06
		0.94	0.97	0.89	1.01	1.01	1.06	0.94	0.93	0.90	0.92	0.91	0.86
		1,294	1,284	1,125	1,228	1,284	1,378	1,381	1,356	1,433	1,454	1,442	1,411
B.22	330-334	1,336	1,524	1,413	1,544	1,656	1,732	1,761	1,716	1,811	1,868	1,877	1,854
		M	M	M	M	M	M	M	M	M	M	M	M
		F	F	F	F	F	F	F	F	F	F	F	F



**Table LXXVI.** Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Deaths and death rates per million living, and per 100 deaths from all circulatory diseases, by sex and age, 1957, England and Wales

Abbreviated List No.	Cause of death	All ages	0—	15—	25—	45—	65—	75 and over
B24	Rheumatic fever .. { Deaths Rate Per cent	78 3.6 0.1	12 2.3 21.1	7 2.5 5.0	22 3.6 0.9	25 4.6 0.1	8 5.7 0.0	4 5.9 0.0
B25	Chronic rheumatic heart disease { Deaths Rate Per cent	2,989 138 3.1	11 2.7 19.3	68 25 48.2	551 89 22.1	1,348 249 5.4	641 549 2.2	370 549 0.9
B26	Arteriosclerotic heart disease { Deaths Rate Per cent	47,809 2,208 49.9	— — —	8 2.9 5.7	1,359 221 54.5	17,524 3,240 70.0	16,131 11,555 55.9	12,787 18,972 32.6
B27	Degenerative heart disease { Deaths Rate Per cent	24,304 1,123 25.4	8 7.5 14.0	14 5.1 9.9	131 354 5.3	1,915 3,402 7.6	5,643 4,042 19.6	16,593 14,990 42.3
B28	Other diseases of the heart { Deaths Rate Per cent	4,745 219 5.0	18 3.4 31.6	17 6.2 12.1	128 21 5.1	1,082 200 4.3	1,482 1,062 5.1	2,018 2,994 5.1
B29	Hypertension with heart disease { Deaths Rate Per cent	5,368 248 5.6	— — —	2 0.73 1.4	57 9.3 2.3	1,181 218 4.7	1,937 1,388 6.7	2,191 3,251 5.6
B30	Hypertension without heart disease { Deaths Rate Per cent	3,424 158 3.6	— — —	8 2.9 5.7	134 22 5.4	922 170 3.7	1,091 782 3.8	1,269 1,883 3.2
B31	Other circulatory diseases { Deaths Rate Per cent	7,066 326 7.4	8 7.5 14.0	17 6.2 12.1	110 18 4.4	1,050 194 4.2	1,904 1,364 6.6	3,977 5,901 10.1
B32	All circulatory diseases { Deaths Rate Per cent	95,783 4,725 100	57 7.5 100	141 51 100	2,492 405 100	25,047 4,631 100	28,837 20,657 100	39,209 58,174 100
B33	Vascular lesions affecting central nervous system { Deaths Rate	30,537 1,411	43 8.2	40 15	489 79	5,936 1,098	9,624 6,894	14,405 21,372

per cent in the C.M.I. for vascular lesions affecting the central nervous system for both males and females during the same period. The slight fall in the C.M.I. for 1957 as compared with 1956 should not be regarded in any favourable light, as it was most probably the result of the mild winter of 1956-57. This enabled old people to survive when any prolonged cold spell would have brought in its train an increase in mortality from most of the diseases associated with increasing age. The influenza epidemic in the latter half of 1957 did not counterbalance the effect of the mild weather on the all-ages crude death rate.

It is probably true to say, therefore, that in recent years there has been some increase in mortality from cardiovascular disease among males which has not been accompanied by a similar increase among females.

### Deaths from cardio- and cerebro-vascular disease by sex and age

Table LXXVI (page 151) shows the distribution of deaths from cardio- and cerebro-vascular disease by sex and age. It also shows the proportion per 100 deaths, assigned to particular causes by sex- and age-group.

Rheumatic fever and chronic rheumatic heart disease are diseases of relatively great importance in the young and young middle-aged. In women aged 25-44 these conditions were responsible for 60 per cent of deaths from cardiovascular disease. Although in both sexes the death rate from chronic rheumatic heart disease increased with age, its importance as a cause of death relative to other cardiovascular disease diminished, and in men and women aged 65-74 was responsible for only 2.2 and 4.8 per cent of deaths respectively.

With the so-called group of arteriosclerotic and degenerative heart diseases there is known to be a certain amount of looseness in terminology between the one and the other, especially in death certification. The table below shows the percentage of deaths from cardiovascular disease assigned to each group separately and together.

Cause of Death	Percentage of all cardiovascular deaths assigned to cause					
	Males			Females		
	45-	65-	75 and over	45-	65-	75 and over
Arteriosclerotic heart disease (I.S.C. No. 420)	70.0	55.9	32.6	41.9	43.8	23.4
Degenerative heart disease (I.S.C. Nos. 421, 422)	7.6	19.6	42.3	12.2	24.4	49.0
Arteriosclerotic and degenerative heart disease (I.S.C. Nos. 420-422)	77.6	75.5	74.9	54.1	68.2	72.3

Evidence presented in Part III of the *Review* for 1956\* showed that there was considerable confusion between the two causes under discussion, and this table adds weight to the view that it is unwise to make much distinction between arteriosclerotic and degenerative heart disease as used in the present classification in analysing age- and sex-trends.

Hypertension with or without heart disease is not shown as a very important cause of death, mainly because of the application of rules for coding death certificates. Even the distinction between hypertension with or without heart

\*Certification of Cause of Death. *The Registrar General's Statistical Review, 1956, Part III, Commentary*, pp. 182-207. H.M.S.O. London, price 16s. 6d. net.

disease should be treated with some reserve, as the coding rules result in the assignment of hypertensive heart disease to I.S.C. No. 443 (Other and unspecified hypertensive heart disease), while hypertensive heart failure would be assigned to I.S.C. No. 444 (Essential benign hypertension). This apparent paradox is explained on the grounds that heart failure (not otherwise specified) is assigned to the group of symptoms or ill-defined conditions, whereas heart disease is assigned to one of the rubrics of the cardiovascular disease group. In 1957, out of a total of 4,041 deaths assigned to I.S.C. No. 444, there were 2,559 (63 per cent) in which the death certificate gave either hypertensive heart failure as the cause of death, or there was mention of any of the conditions included in I.S.C. No. 782·4 (Acute heart failure, undefined). In addition there were a further 355 (9 per cent) in which hypertension was mentioned with any condition included in I.S.C. No. 421 (Chronic endocarditis not specified as rheumatic) or I.S.C. Nos. 430–433 (Acute and subacute endocarditis, acute myocarditis not specified as rheumatic, acute pericarditis specified as rheumatic, and functional disease of the heart).

### Geographical distribution

Tables LXXVII and LXXVIII (pages 154–155) compare the death rates from certain cardio- and cerebro-vascular causes of men and women aged 45–64 and 65 and over living in the standard regions, conurbations, and urban and rural districts of England and Wales.

Chronic rheumatic heart disease and other valvular disease gave rates which decreased with decreasing urbanisation in both sexes and in both age-groups with the exception of the rate of persons aged 65 and over in rural districts, which was slightly higher than the corresponding rate in the small urban areas, and of the female rate at 45–64, which was greater in the aggregate of urban areas with populations under 50,000 than in that of urban areas with populations of 50,000 and under 100,000. In the 45–64 year age-group the death rate was highest in the North Western and the East and West Ridings regions and in Wales.

For arteriosclerotic heart disease, a descending urban/rural gradient of mortality is to be seen except for the rates for conurbations, which are lower than those for other large urban areas. Regional rates are highest in the regions in the northern part of England, and in Wales.



**Table LXXVII. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 45-64, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1957, England and Wales**

	All causes		Vascular lesions affecting central nervous system (330-334)		Chronic rheumatic heart disease and chronic endocarditis (410-416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430-434)		Hypertension with or without heart disease (440-447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES														
Regions:	13,706	7,591	1,098	1,063	356	426	3,240	805	247	182	200	120	389	250
Northern .. .. .	14,835	8,283	1,218	1,223	330	442	3,830	1,141	282	218	221	127	327	313
East and West Ridings .. .. .	14,687	8,304	1,190	1,226	427	546	3,683	993	303	228	205	139	333	256
North Western .. .. .	16,010	8,514	1,356	1,218	448	577	3,806	885	340	234	244	164	403	269
North Midland .. .. .	12,396	7,269	1,038	1,073	323	393	2,743	691	267	218	217	129	394	260
Midland .. .. .	14,162	7,614	1,184	1,067	358	437	2,957	740	250	181	205	128	443	275
Eastern .. .. .	11,346	6,860	950	943	299	272	2,761	654	214	142	179	103	291	201
London and South Eastern .. .. .	12,997	7,052	868	865	337	398	3,053	680	129	106	176	81	382	222
Southern .. .. .	12,043	6,519	954	882	294	288	2,902	742	218	168	150	96	371	195
South Western .. .. .	12,332	7,264	1,175	1,090	261	331	2,970	752	332	193	208	95	437	274
Wales (including Monmouthshire)	15,235	8,428	1,299	1,387	412	422	3,604	1,038	326	283	195	185	530	277
Conurbations	14,624	7,777	1,076	990	387	502	3,427	792	201	146	218	118	402	252
Tyneside .. .. .	16,110	8,423	1,470	1,444	270	550	3,980	1,027	170	207	170	99	350	315
West Yorkshire .. .. .	15,828	8,968	1,326	1,319	447	586	4,191	1,203	321	227	298	187	349	279
South East Lancashire .. .. .	16,197	8,744	1,400	1,135	407	634	3,593	781	343	239	237	187	427	254
Merseyside .. .. .	17,191	8,483	1,257	1,170	566	631	4,118	989	296	125	368	125	375	227
West Midlands .. .. .	15,064	7,701	1,223	1,059	358	441	2,992	684	242	177	204	135	487	281
Greater London .. .. .	13,265	7,081	825	816	361	430	3,174	680	112	91	182	78	392	236
Areas outside conurbations:														
Urban areas with populations of 100,000 and over .. .. .	14,821	7,846	1,143	1,075	381	455	3,463	870	270	193	224	132	425	290
Urban areas with populations of 50,000 and under 100,000 .. .. .	13,713	7,569	1,100	1,062	360	371	3,270	881	255	164	216	153	363	213
Urban areas with populations under 50,000 .. .. .	13,329	7,473	1,211	1,160	332	373	3,230	846	284	195	184	107	379	258
Rural districts .. .. .	11,593	7,163	979	1,095	305	331	2,727	706	278	244	161	116	361	223

Table LXXVIII. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 65 and over, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1957, England and Wales

	All causes		Vascular lesions affecting central nervous system (330-334)		Chronic rheumatic heart disease and chronic endocarditis (410-416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430-434)		Hypertension with or without heart disease (440-447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES														
Regions:	79,897	57,339	11,608	11,317	996	1,035	13,970	7,351	10,235	9,993	1,691	1,354	3,134	2,849
Northern	81,757	62,309	14,472	13,546	806	840	15,160	8,907	10,715	10,825	1,757	1,727	2,937	2,784
East and West Ridings	83,177	60,086	13,780	12,918	823	1,050	15,113	8,545	9,803	9,606	1,516	1,526	3,091	3,181
North Western	88,163	64,286	13,523	13,090	1,004	1,154	14,534	7,677	11,820	11,037	2,018	1,874	3,067	2,822
North Midland	75,537	55,591	11,616	11,500	848	900	12,348	6,539	10,628	10,107	1,671	1,374	3,184	2,639
Midland	80,365	57,696	12,005	10,932	932	1,014	12,011	6,496	10,810	10,489	1,651	1,243	3,460	2,719
Eastern	72,607	53,333	10,757	10,722	832	918	12,832	7,153	9,723	9,035	1,798	1,384	3,460	2,490
London and South Eastern	78,263	53,557	9,265	9,438	1,149	1,139	14,376	7,068	8,774	8,801	1,631	1,324	3,388	2,979
Southern	74,340	52,868	10,844	10,059	1,170	1,109	14,078	7,245	8,730	9,377	1,652	1,064	2,624	2,400
South Western	77,208	56,549	10,767	11,126	956	846	13,792	6,846	12,981	12,237	1,597	1,142	3,013	2,498
Wales (including Monmouthshire)	85,333	62,337	12,620	14,041	1,171	977	14,736	7,843	11,155	11,006	1,481	1,169	3,519	3,285
Conurbations	83,417	58,210	11,041	10,802	1,117	1,168	14,280	7,511	9,040	8,908	1,784	1,425	3,533	3,182
Tyneside	85,333	62,961	14,194	12,922	1,083	1,059	15,306	8,255	9,639	9,843	1,444	1,706	3,353	3,333
West Yorkshire	88,480	63,484	14,933	13,548	827	1,175	16,267	9,113	10,413	9,675	1,800	1,444	3,373	3,061
South East Lancashire	89,676	65,414	13,676	13,462	1,108	1,124	13,402	7,138	12,157	11,266	2,157	1,531	3,098	2,675
Merseyside	91,000	62,345	12,712	11,678	1,115	966	15,404	9,172	7,188	7,386	2,308	1,828	3,586	3,575
West Midlands	84,138	58,941	12,425	11,156	874	993	11,908	6,289	9,952	10,133	1,782	1,444	3,508	3,089
Greater London	78,980	53,878	8,509	9,077	1,247	1,258	14,428	7,240	7,328	7,913	1,629	1,270	3,609	3,223
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	82,579	58,130	12,336	11,846	1,046	1,083	15,375	7,976	9,216	9,768	1,645	1,242	3,139	2,934
Urban areas with populations of 50,000 and under 100,000	80,744	56,072	11,869	11,114	950	1,015	14,338	7,356	10,444	10,409	1,894	1,420	2,869	2,534
Urban areas with populations under 50,000	79,136	56,728	12,448	11,997	860	909	13,807	7,165	11,195	10,617	1,602	1,246	3,103	2,638
Rural districts	73,522	56,466	11,068	11,204	943	914	12,749	6,853	11,531	11,265	1,598	1,394	2,648	2,554

The death rates from myocardial degeneration show in the older age-group an urban/rural gradient opposite to that for arteriosclerotic heart disease, with mortality highest in the rural districts. In the 45-64 year age-group the position is more confused but the same tendency is discernible. How much of these urban and rural differences are attributable to differing diagnostic practice in town and country is not known, but the table below shows the death rates from the two causes combined.

Type of area	Death rate per million living from arterio-sclerotic heart disease and myocardial degeneration (I.S.C. Nos. 420, 422)			
	45-64		65 and over	
	M	F	M	F
Conurbations .. .. .	3,628	938	23,320	16,419
<i>Areas outside conurbations:</i>				
Urban areas with populations of 100,000 and over .. .. .	3,733	1,064	24,591	17,743
Urban areas with populations of 50,000 and under 100,000 .. .. .	3,525	1,045	24,781	17,765
Urban areas with populations under 50,000 .. .. .	3,514	1,041	25,202	17,783
Rural districts .. .. .	3,005	950	24,279	18,119

There is a tendency for the death rate to be lower in the bigger urban areas among women of 65 and over, and this trend was possibly reversed in males aged 45-64.

There was no urban/rural gradient for death rates from vascular lesions of the nervous system or from other diseases of the heart.

Broadly, these urban/rural relationships are similar to those revealed in the area mortality analysis of 1950-53.\*

#### **Congenital malformations of the circulatory system**

During 1957 there were 2,037 deaths attributed to congenital malformations of the circulatory system; 1,126 of these were of males and 911 of females. As might have been expected, a large proportion (63 per cent) of these deaths took place during the first year of life, 35 per cent during the first four weeks.

The table below shows the crude death rate per million living attributed to this group of causes for each year from 1940.

Death rate per million living						Death rate per million living					
			M	F	P				M	F	P
1940	..	..	58	36	46	1949	..	..	51	41	46
1941	..	..	58	37	46	1950	..	..	55	43	49
1942	..	..	63	39	50	1951	..	..	50	42	46
1943	..	..	63	40	50	1952	..	..	42	35	39
1944	..	..	71	39	53	1953	..	..	43	34	39
1945	..	..	66	41	52	1954	..	..	45	33	39
1946	..	..	62	41	51	1955	..	..	47	33	40
1947	..	..	64	47	55	1956	..	..	47	34	40
1948	..	..	53	39	45	1957	..	..	52	39	45

\*The Registrar General's Decennial Supplement, England and Wales, 1951. Area Mortality. H.M.S.O. London, price £3 10s. net.



The death rates in 1957 were lower than nearly all those recorded between 1940 and 1951. This was due to a coding change in 1951 which altered the assignment of deaths attributed to ruptured congenital cerebral aneurysm from "Other circulatory malformations" (I.S.C. No. 745·6) to "Subarachnoid haemorrhage" (I.S.C. No. 330).

However, from 1952 the change, though small, appears to be in an upward direction. With disease of this nature, where the causes, whatever they may be, are pre-natal, there can be little doubt that the increase in the death rates for the older age-groups (Table LXXIX, page 158) is largely the result of changing diagnostic fashion, although other factors may play their part. Two of these deserve mention. The use of antibiotics will prevent some patients with congenital heart disease from dying of subacute bacterial endocarditis or other intercurrent infection. These patients, whose deaths previously may have been assigned to the infection, may now die later from the primary condition, thus causing a small increase in the number of deaths. Secondly, the introduction of cardiac surgery for some severe congenital defects, although in most cases of great benefit to the patient, is accompanied by some small operative mortality, and it is possible that these few deaths may cause an apparent small increase in mortality from a rare condition.

Infant deaths, on the other hand, may reflect any small changes in incidence that are occurring, although here again caution must be exercised in interpretation because of improvement in diagnosis.

Between 1952 and 1957 there was a 17 per cent increase in deaths of children under one year assigned to congenital malformations of the circulatory system. Much of this increase was the result of a coincident increase in the birth rate and expressing these figures as an infant mortality rate the increase is somewhat smaller; it rose from 1·63 per 1,000 live births in 1952 to 1·77 in 1957, an increase of 9 per cent. Furthermore, the trend in the rate over the intervening years fluctuates considerably and is not so definitely upwards.

During the same period there was no increase in infant mortality from congenital malformations as a whole, and this finding adds weight to the hypothesis that any small increase may have been the result of improvement in diagnosis, or alternatively the result of improvement in the care of the sickly new-born child, allowing it to remain alive for a longer period, and thus giving more time for a firm diagnosis to be made. Examination of the age at death of infants suffering from congenital heart disease in 1952 and 1957 is shown in the table below:

Age at death	1952		1957	
	Deaths	Rate per thousand live births	Deaths	Rate per thousand live births
Under 1 week .. .. .	429	0·64	454	0·63
1 week and under 1 month .. .. .	205	0·30	257	0·36
1 month and under 1 year .. .. .	461	0·68	567	0·78
Total under 1 year .. .. .	1,095	1·63	1,278	1·77

From this table it appears that the increase in the rate has not taken place at the earliest age, as would have been expected if the increase in the infant mortality rate had been the result of an increase in incidence of the disease. It would be unwise, therefore, to assume that any increase is taking place in the incidence of congenital heart disease without considerable further evidence.

**Table LXXIX. Congenital malformations of the circulatory system (I.S.C. No. 754): Deaths and death rates per million living, by sex and age, 1951 to 1957, England and Wales**

Age	1951		1952		1953		1954		1955		1956		1957	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Deaths</b>														
All ages	1,050	963	890	804	913	786	948	767	1,007	756	1,017	791	1,126	911
0-	582	444	604	491	623	491	647	514	645	430	677	506	725	553
1-	78	60	56	68	60	64	48	58	80	76	58	59	71	60
5-	58	35	42	51	51	37	50	42	53	55	60	49	68	55
15-	177	167	132	111	117	106	122	87	144	115	132	102	140	115
45-	126	180	40	56	46	58	60	45	67	58	65	53	94	95
65 and over	29	77	16	27	16	30	21	21	18	22	25	22	28	33
<b>Death rates per million living*</b>														
All ages	49.9	42.3	42.2	35.2	43.1	34.3	44.5	33.4	47.1	32.8	47.3	34.2	52.0	39.2
0-	1.67	1.35	1.75	1.50	1.77	1.48	1.87	1.57	1.88	1.33	1.88	1.49	1.95	1.58
1-	49.8	40.2	38.4	48.9	43.1	48.2	35.3	44.8	59.4	59.2	43.3	46.3	52.6	46.8
5-	18.9	11.9	13.1	16.5	15.4	11.6	14.8	13.0	15.4	16.7	17.1	14.6	19.2	16.2
15-	19.3	17.7	14.5	11.8	12.9	11.4	13.6	9.42	16.0	12.5	14.8	11.2	15.7	12.7
45-	25.7	31.7	8.00	9.76	9.05	10.0	11.6	7.69	12.8	9.81	12.2	8.88	17.4	15.8
65 and over	14.7	26.9	8.01	9.23	7.98	10.1	10.4	6.93	8.85	7.15	12.2	7.03	13.5	10.3

\*At ages under 1 year, per thousand live birth occurrences.

Table LXXX (page 160) shows the number of deaths assigned to congenital malformations of the circulatory system in the five-year period 1953-57, by age, sex, and detailed cause of death. Unfortunately, 63 per cent of the deaths were assigned to "Other and unspecified malformations of the heart", the majority being unspecified, but certain factors concerning the more specific causes are worthy of comment.

The table below shows the ratios of male to female deaths for individual malformations at ages 0-4 and 5 and over.

I.S.C. No.	Cause of death	All ages	Under 5	5 and over
754·0	Tetralogy of Fallot .. .. .	1·35	1·35	1·33
754·1	Patent ductus arteriosus (Botalli) .. ..	1·09	1·21	0·70
754·2	Interventricular septal defect .. ..	1·05	1·08	0·96
754·3	Interauricular septal defect .. ..	0·84	1·27	0·54
754·4	Other and unspecified malformations of heart .. ..	1·29	1·30	1·24
754·0-4	All congenital heart disease .. ..	1·21	1·27	1·04
754·5	Coarctation of aorta .. ..	1·66	1·19	2·07
754·6	Other circulatory malformations .. ..	1·68	1·88	1·42
754·5, 754·6	All circulatory non-cardiac malformations .. ..	1·67	1·57	1·79
754	All circulatory malformations ..	1·25	1·29	1·15

The all-ages sex ratio shows a predominance of male deaths for each individual cause with the exception of interauricular septal defect. However, for all forms of congenital heart disease male deaths predominate in the 0-4 year age-group. Above that age the position is not so clear, but in all cases the male/female ratio of deaths is less than in the 0-4 year age-group. It would appear, therefore, that congenital heart defects are, as a general rule, more severe in their effects in the male, causing death earlier. This is particularly noticeable with patent ductus arteriosus and interauricular septal defects. These two conditions are generally considered to be commoner in females.\* The male preponderance of early infant deaths may be the result of more multiple defects.

A rather different picture emerges with coarctation of the aorta. There is a male predominance in deaths which increase from a ratio of 1·19 for deaths under five years of age to 2·07 for deaths over that age. It will be seen in Table LXXX that after a high mortality in the first year of life, death from the condition becomes relatively rare until early adult life. Bedford and Brown (loc cit.) state that there are two types of coarctation of the aorta. The first is an infantile type, with a diffuse narrowing of the aortic isthmus, often associated with other cardiac malformation, and usually incompatible with other than a short duration of life. The second, or adult type, consisting of an abrupt hour-glass constriction of the aorta is often symptomless until early or middle adult life. It would seem from the mortality picture presented in Table LXXX that these two types of coarctation may have somewhat different sex ratios.

\*Bedford, D. E. and Brown, J. W. *The British Encyclopaedia of Medical Practice*, 1951, Vol. 6, p. 244. Butterworths, London.



Table LXXX. Deaths from congenital malformations of the circulatory system (I.S.C. No. 754) and its subdivisions, by sex and age, 1953-57, England and Wales

Age	Congenital malformations of the circulatory system (754)		Tetralogy of Fallot (754.0)		Patent ductus arteriosus (754.1)		Interventricular septal defect (754.2)		Interauricular septal defect (754.3)		Other and unspecified malformations of heart (754.4)		Coarctation of aorta (754.5)		Other circulatory malformations (754.6)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All ages	5,011	4,011	226	168	294	269	347	332	312	372	3,218	2,503	308	185	306	182
0-	3,317	2,494	94	71	237	190	229	214	176	128	2,304	1,714	93	80	184	97
1-	317	317	52	37	13	16	25	21	17	24	191	207	8	5	11	7
5-	282	238	51	31	9	13	16	27	15	14	149	136	25	11	17	6
15-	655	525	27	25	25	30	46	34	50	84	323	251	136	63	48	38
45-	332	309	2	4	6	12	23	26	41	87	188	131	38	24	34	25
65 and over	108	128	—	—	4	8	8	10	13	35	63	64	8	2	12	9

### International comparison of infant mortality rates from congenital malformations of the circulatory system

The table below shows the infant mortality rates (per 1,000 live births) for certain countries from all congenital malformations in 1953, and from congenital malformations of the circulatory system during various periods between 1950 and 1954.

	Infant mortality rate				Percentage of deaths from all congenital malformations due to those of circulatory system	
	All congenital malformations*		Congenital malformations of circulatory system			
	M	F	M	F	M	F
Canada 1950-54 .. .. .	5.32	5.05	2.08	1.68	39.3	32.8
United States (Whites) 1950-53 ..	4.34	3.77	2.06	1.59	47.5	41.5
Denmark 1951-54 .. .. .	5.48	4.32	2.62	2.13	53.3	52.1
Norway 1951-54 .. .. .	3.81	2.77	1.32	1.19	37.7	39.0
Netherlands 1950-54 .. .. .	4.96	4.69	1.92	1.59	39.3	31.8
Sweden 1952-53 .. .. .	3.55	3.34	1.59	1.46	44.1	42.2
England and Wales 1950-54 ..	4.32	4.25	1.79	1.46	39.3	34.0
Scotland 1950-54 .. .. .	5.25	4.83	1.77	1.43	32.9	27.5
Northern Ireland 1950-54 ..	6.32	5.88	2.14	1.65	35.7	26.6
Australia 1950-53 .. .. .	4.25	3.31	1.80	1.39	44.2	40.0
Japan 1951-54 .. .. .	2.32	1.88	1.04	0.69	42.5	47.2

\*All rates in these columns are for 1953 only.

As with all international comparisons, care has to be taken in the interpretation of tables of this nature. For example, it may be that the low infant mortality rate from congenital malformations in Japan was due in large part to differences in diagnostic practice. The high rate in Denmark may have resulted from the extensive researches of the Institute of Human Genetics at Copenhagen, making doctors more aware of the problems of congenital disease. With these reservations in mind, the general similarity of the international comparisons is apparent, suggesting that the effect of pre-natal influences is basically similar in all countries. The ratio of the infant mortality rate in males to that of females is between 1.20 and 1.30 in all countries shown, with the exception of Norway and Sweden where it was 1.11 and 1.09 respectively, and for Japan where it was 1.51. These exceptions may have been the result of differences in diagnostic practice, though it is possible that they may result from real differences in incidence of one or more of the individual defects.

## ACCIDENTAL AND VIOLENT DEATHS

There were 21,561 deaths due to accidents and violence in 1957, compared with 21,870 in 1956 and 21,469 in 1955. The crude death rates, which were 604 per million living for males and 383 for females in 1956, decreased to 594 and 374 respectively. The three principal causes of accidental and violent death also showed decreased rates in 1957, except for female deaths from suicide and self-inflicted injury, as follows :

	Motor vehicle accidents		Accidental falls		Suicide and self-inflicted injury	
	Males	Females	Males	Females	Males	Females
1956	174	56	99	149	149	90
1957	170	53	92	142	146	92

**Table LXXXI. Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901-1945, and 1946 to 1957, England and Wales**

		Males					Females				
		All ages	0-	15-	35-	65 and over	All ages	0-	15-	35-	65 and over
1901-10	..	5.05	3.22	12.88	7.22	2.31	2.31	2.85	3.06	2.18	1.54
1911-20	..	5.69	3.74	15.69	7.16	2.29	2.31	2.95	2.97	2.26	1.63
1921-30	..	5.48	4.43	15.49	7.06	2.37	2.49	3.06	4.02	2.74	1.79
1931-35	..	6.05	5.60	20.29	7.37	2.55	3.04	4.11	5.54	3.31	2.25
1936-40	..	7.30	7.30	29.58	8.67	2.89	4.10	5.73	9.52	4.82	2.83
1941-45	..	9.13	10.34	46.29	9.46	2.85	4.56	8.25	12.26	5.58	2.74
1946 ..	..	5.08	7.86	25.39	6.09	2.22	3.00	5.91	5.84	3.45	2.27
1947 ..	..	4.89	7.65	24.86	6.09	2.14	2.97	5.86	5.53	3.55	2.22
1948 ..	..	4.88	8.91	24.61	6.04	2.13	3.02	7.06	5.56	3.70	2.18
1949 ..	..	4.62	9.47	27.04	5.87	1.96	2.72	7.02	5.80	3.34	2.01
1950 ..	..	4.56	9.20	30.36	5.93	1.94	2.80	7.24	6.59	3.44	2.13
1951 ..	..	4.42	10.22	34.74	5.68	1.85	2.73	7.36	8.21	3.42	2.06
1952 ..	..	4.65	10.28	37.65	5.97	1.91	2.84	7.67	9.46	3.58	2.11
1953 ..	..	4.75	9.63	38.86	6.18	2.13	3.09	7.43	10.10	4.01	2.35
1954 ..	..	4.86	9.49	39.22	6.33	2.35	3.40	7.00	12.20	4.14	2.75
1955 ..	..	4.84	10.44	43.29	6.21	2.24	3.39	7.91	12.81	4.35	2.68
1956 ..	..	4.85	9.90	43.90	6.36	2.32	3.50	7.70	13.78	4.71	2.76
1957 ..	..	4.83	9.30	43.18	6.24	2.28	3.50	7.13	13.97	4.62	2.77

Table LXXXI (above) shows that there was a slight decrease in 1957 compared with the previous year in the percentage of male deaths which were attributed to violent causes, and this decrease was reflected in each of the age-groups shown. There was no change between 1956 and 1957 in the proportion of violent to total female deaths, the decreased percentages at ages 0-14 and 35-64 being offset by increased proportions at ages 15-34 and 65 and over.



**Table LXXXII. Accidents and violence: Death rates per million living, by sex and age, 1901–1945, and 1946 to 1957, England and Wales**

	All ages	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
<b>Males</b>												
1901–10 ..	827	1,231	329	262	447	555	677	914	1,257	1,623	1,818	2,621
1911–20 ..	857	934	395	304	596	902	828	894	1,082	1,395	1,715	2,757
1921–30 ..	709	683	375	243	449	584	536	658	917	1,259	1,616	2,842
1931–35 ..	770	697	370	228	533	739	602	640	921	1,271	1,599	3,358
1936–40 ..	968	775	420	297	651	1,121	826	825	1,046	1,475	1,835	3,887
1941–45 ..	1,167	897	612	435	935	2,192	1,263	870	1,008	1,323	1,691	3,183
1946 .. ..	622	688	328	251	414	565	453	478	582	864	1,213	2,612
1947 .. ..	628	664	381	228	398	528	465	465	633	850	1,210	2,786
1948 .. ..	562	585	318	179	350	458	398	406	574	844	1,136	2,320
1949 .. ..	569	547	299	194	386	509	387	433	583	805	1,084	2,554
1949* .. ..	567	541	298	193	386	508	387	431	579	797	1,085	2,556
1950* .. ..	562	461	252	153	376	555	423	418	579	807	1,120	2,451
1951* .. ..	591	487	259	190	362	608	474	429	591	814	1,137	2,745
1952* .. ..	568	473	217	167	415	643	445	436	546	796	1,092	2,450
1953* .. ..	582	418	215	151	373	603	446	429	583	822	1,198	2,811
1954* .. ..	593	393	168	161	369	580	426	445	583	846	1,256	3,214
1955* .. ..	605	386	207	181	444	671	446	444	567	823	1,243	3,166
1956* .. ..	604	392	173	151	410	608	442	428	578	874	1,259	3,320
1957* .. ..	594	351	168	156	456	644	421	456	566	845	1,197	3,126
<b>Females</b>												
1901–10 ..	329	1,059	226	81	103	111	135	198	307	423	752	2,287
1911–20 ..	300	767	234	98	117	120	127	179	272	382	728	2,364
1921–30 ..	283	487	182	71	117	127	126	168	268	397	716	2,516
1931–35 ..	346	505	201	81	142	155	161	194	297	443	878	3,044
1936–40 ..	477	570	230	137	222	233	235	281	412	595	1,116	3,707
1941–45 ..	499	687	322	206	256	274	276	307	404	552	959	3,064
1946 .. ..	326	494	149	70	83	86	116	152	225	351	661	2,725
1947 .. ..	334	503	162	63	82	81	109	145	237	356	703	2,707
1948 .. ..	306	434	153	63	72	76	99	137	231	347	614	2,341
1949 .. ..	306	387	128	63	81	92	85	128	212	336	617	2,513
1949* .. ..	302	378	128	63	79	92	81	126	212	330	612	2,492
1950* .. ..	308	338	127	47	80	81	79	125	223	323	606	2,698
1951* .. ..	321	350	96	45	88	87	85	126	228	327	648	2,803
1952* .. ..	298	330	100	50	77	86	85	120	213	322	604	2,406
1953* .. ..	329	319	94	62	73	86	88	139	232	349	670	2,727
1954* .. ..	358	264	86	48	81	90	107	138	239	357	783	3,066
1955* .. ..	370	300	94	59	94	85	96	143	241	377	775	3,128
1956* .. ..	383	284	87	52	76	91	101	140	260	412	764	3,242
1957* .. ..	374	279	83	45	79	98	103	145	258	396	762	2,991

\* According to the Sixth Revision of the International Classification. Other years according to the classification in use at the time.

Table LXXXII (above) shows the death rates from violent and accidental causes per million living. The “all ages” death rates were lower in 1957 for both males and females than in the preceding year. For boys aged 0–4 and girls aged 5–9, the rates were the lowest recorded in the table. There was an increase in the rate for young men aged 15–19 from 410 in 1956 to 456 in 1957; this was the highest rate to occur in this age-group since 1945. Among people of both sexes aged 45 and over, the rates were slightly lower in 1957 than in the year before.

## Motor and other vehicle accidents

In 1957 there were 3,608 male and 1,219 female deaths due to accidents involving motor vehicles on public highways ; this was a total decrease of 112 deaths compared with 1956. These accidents involved the deaths of 1,972 pedestrians and 496 pedal cyclists. In addition, 65 male and 6 female deaths were attributed to motor vehicle accidents occurring elsewhere than on public highways. There were 419 deaths of riders of motorcycles in accidents not involving collision ; male deaths from this cause have increased year by year from 133 in 1949 to 387 in 1957.

**Table LXXXIII. Motor vehicle accidents: Death rates per million living, by sex and age, and comparative mortality indices by sex, 1931-1945, and 1946 to 1957, England and Wales**

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	C.M.I.† (1938 = 1.00)
<b>Males</b>												
1931-35 ..	208	184	93	204	368	210	133	153	206	363	678	1.12
1936-40 ..	216	159	86	176	363	209	152	171	257	411	749	1.01
1941-45 ..	199	198	113	152	227	193	149	160	228	353	556	0.92
1946 .. ..	153	144	109	161	205	139	109	102	160	241	498	0.73
1947 .. ..	146	134	75	127	209	139	106	111	147	246	460	0.70
1948 .. ..	126	135	63	122	173	112	79	97	142	194	400	0.60
1949 .. ..	140	123	80	147	226	117	103	101	137	229	451	0.67
1949* ..	142	126	83	150	232	118	105	101	138	232	454	0.68
1950* ..	151	104	60	177	279	164	106	102	153	242	439	0.72
1951* ..	161	112	88	178	308	174	112	117	160	231	505	0.77
1952* ..	149	105	73	165	301	150	123	105	144	219	403	0.71
1953* ..	158	98	61	170	307	164	110	126	160	245	518	0.75
1954* ..	161	77	57	194	323	165	116	127	170	259	564	0.76
1955* ..	171	83	64	234	388	170	125	130	164	273	540	0.81
1956* ..	174	86	61	236	344	182	121	138	185	270	587	0.83
1957* ..	170	74	58	254	378	164	130	125	166	263	604	0.81
<b>Females</b>												
1931-35 ..	68	106	34	49	50	31	29	49	95	181	267	1.17
1936-40 ..	64	84	30	49	48	29	27	45	85	173	279	1.02
1941-45 ..	56	106	42	42	40	29	26	37	61	107	172	0.86
1946 .. ..	47	72	30	36	27	21	20	27	56	100	185	0.70
1947 .. ..	47	71	26	37	23	17	22	33	54	100	177	0.69
1948 .. ..	43	79	31	25	16	14	19	21	49	101	157	0.64
1949 .. ..	41	65	32	32	30	10	16	22	44	95	151	0.60
1949* ..	41	66	32	32	30	10	16	22	44	95	151	0.61
1950* ..	46	64	25	40	30	17	19	35	48	84	200	0.67
1951* ..	49	58	22	47	37	19	23	35	54	101	198	0.71
1952* ..	42	52	21	34	31	19	18	28	43	94	168	0.62
1953* ..	45	56	25	36	37	16	18	33	49	87	181	0.65
1954* ..	51	45	15	36	37	23	23	32	63	120	218	0.72
1955* ..	55	52	26	58	45	22	26	32	57	121	235	0.78
1956* ..	56	47	22	42	40	26	26	38	63	129	236	0.79
1957* ..	53	42	22	42	46	24	22	37	59	117	222	0.74

\* According to the Sixth Revision of the International Classification (Nos. E810-E835). Other years according to the classification in use at the time.

† C.M.I.s are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

The death rates per million living due to motor vehicle accidents are shown in Table LXXXIII (page 164). At ages 0-9 the rates reached the low levels of 74 for boys and 42 for girls. At the other end of life, the rate of 604 for old men aged 75 and over was the highest since 628 was reached in this age-group in 1942. Female rates at ages 25 and over were lower in 1957 than in the preceding year, but at ages 20-24 the rate of 46 was the highest since 1941, when it was 50.

**Table LXXXIV. Motor vehicle accidents: Death rates per million living, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1957, England and Wales**

*(Based on deaths according to area of normal residence)*

	Males					Females				
	All ages	0-	15-	45-	65 and over	All ages	0-	15-	45-	65 and over
<b>ENGLAND AND WALES</b>	170	68	199	142	374	53	35	30	47	156
Conurbations (excluding Greater London) .. ..	167	77	187	127	457	60	36	26	60	204
Greater London .. ..	146	51	144	130	448	49	19	24	43	174
<b>Areas outside conurbations:</b>										
Urban areas with populations of 100,000 and over	160	78	163	141	417	57	40	24	51	191
Urban areas with populations of 50,000 and under 100,000 .. ..	151	50	188	130	300	55	37	33	41	167
Urban areas with populations under 50,000 .. ..	163	64	196	141	327	46	37	28	38	118
Rural districts .. ..	212	81	284	176	306	54	43	43	46	112
<b>Regions:</b>										
Northern .. ..	187	101	221	138	396	59	71	39	40	144
East and West Ridings ..	157	64	183	135	349	58	37	24	53	208
North Western .. ..	167	79	185	130	428	57	36	31	49	185
North Midland .. ..	188	82	227	172	335	51	37	29	44	157
Midland .. ..	188	46	240	147	466	58	39	36	56	171
Eastern .. ..	179	56	232	169	283	48	31	25	50	129
London and South Eastern (excluding Greater London) .. ..	157	38	186	148	325	49	34	27	44	118
Southern .. ..	183	44	238	153	348	65	31	58	47	159
South Western .. ..	181	100	223	148	283	39	29	22	40	87
Wales (including Monmouthshire) .. ..	161	117	177	122	302	44	44	19	43	116



Table LXXXIV (page 165) shows death rates from motor vehicle accidents per million living by sex and age in the standard regions and urban and rural aggregates, based on the area of usual residence of the deceased. For males the "all ages" rate was highest, 188 per million, in the North Midland and Midland regions, and lowest, 157 per million, in the East and West Ridings and in the London and South Eastern region (excluding Greater London, where the rate was 146). The highest "all ages" female rate of 65 per million occurred in the Southern region and the lowest, 39, in the South Western region. The death rates in the conurbations and urban and rural aggregates, as percentages of the corresponding England and Wales rate, were as follows :

	Males					Females				
	All ages	0-	15-	45-	65 and over	All ages	0-	15-	45-	65 and over
England and Wales ..	100	100	100	100	100	100	100	100	100	100
Conurbations (excluding Greater London) ..	98	113	94	89	122	113	103	87	128	131
Greater London ..	86	75	72	92	120	92	54	80	91	112
<i>Areas outside conurbations:</i>										
Urban areas with populations of 100,000 and over ..	94	115	82	99	111	108	114	80	109	122
Urban areas with populations of 50,000 and under 100,000 ..	89	74	94	92	80	104	106	110	87	107
Urban areas with populations under 50,000 ..	96	94	98	99	87	87	106	93	81	76
Rural districts ..	125	119	143	124	82	102	123	143	98	72

This table shows the excessive rates for males aged under 65 and females aged under 45 in the rural districts. For people aged 65 and over high death rates were associated with a high degree of urbanisation. Rates for children aged under 15 were above the national level in the conurbations, excluding Greater London, and in the aggregate of large urban areas (populations of 100,000 and over).

Table LXXXV (page 167) shows the numbers of deaths resulting from motor vehicle accidents in 1957, according to the nature of the injury received. Of a total of 4,898 deaths, 2,534 (52 per cent) were due to fractures involving the bones of the head, alone or in conjunction with fractures of other bones. In addition, 566 deaths (12 per cent) were due to head injuries not involving fractures.

Fractures of the spine and trunk bones accounted for 527 deaths (11 per cent) and internal injuries of chest, abdomen, and pelvis for 611 deaths (12 per cent).

Table LXXXVI (page 168) shows the numbers of deaths from motor and road vehicle accidents according to the type of road user. Deaths of pedestrians in motor vehicle accidents on public highways, which had increased during 1952-56, showed a decrease in 1957 to 1,219 for males and 753 for females. There were 1,179 deaths of male motorcyclists in motor vehicle traffic accidents, compared with 1,132 in 1956.

Table LXXXV. Motor vehicle accidents (I.S.C. Nos. E810-E835) : Deaths by sex according to nature of injury and external cause, 1957, England and Wales

External cause of injury (and International Classification Numbers)		MOTOR VEHICLE TRAFFIC ACCIDENTS										Remainder of E810-E835
		E812 to pedestrian	E813 to pedal cyclist	E814 to rider or passenger of motorcycle, with non-motor vehicle or object	E815 to rider or passenger of motorcycle, in collision with other motor vehicle	E816 Other motor vehicle traffic accident involving two or more motor vehicles	E821 to rider of motorcycle, involving collision	E822 involving overturning in roadway	E823 involving running off roadway	E824 Other non-collision motor vehicle traffic accident		
Intl. Classn. Nos.	Nature of injury	Total deaths in motor vehicle accidents	Total ..	E812	E813	E814	E815	E816	E821	E822	E823	E824
		3,673 1,225	..	1,219 753	428 68	62 4	730 60	370 171	387 32	53 16	231 57	62 32
AN 138	Fracture of skull ..	1,958 576	..	577 359	249 42	45 4	470 29	136 62	266 24	23 6	110 28	33 15
AN 139	Fracture of spine and trunk ..	372 171	..	171 115	49 3	1 4	46 4	38 25	17 1	5 3	23 2	4 1
AN 140	Fracture of limbs ..	192 102	..	102 70	15 3	2 —	31 3	13 7	2 —	1 2	10 —	6 2
AN 141	Dislocation without fracture ..	94 12	..	94 4	3 1	—	3 1	7 2	—	—	—	—
AN 142	Sprains and strains of joints and adjacent muscles ..	6 —	..	—	—	—	—	—	—	—	—	—
AN 143	Head injury (excluding fracture) ..	417 149	..	156 86	53 8	7 —	81 7	35 23	42 3	5 1	19 9	7 6
AN 144	Internal injury of chest, abdomen, and pelvis ..	472 139	..	128 64	35 8	3 —	59 10	115 29	37 4	14 3	40 14	8 2
AN 145	Laceration and open wounds ..	49 13	..	14 9	7 —	—	10 1	10 2	4 —	—	4 1	—
AN 146	Superficial injury, contusion and crushing with intact skin surface ..	11 6	..	6 1	—	—	—	—	—	—	—	—
AN 147	Effects of foreign body entering through orifice ..	1 —	..	—	—	—	—	—	—	—	—	—
AN 148	Burns ..	7 2	..	—	—	—	—	—	—	—	—	—
AN 149	Effects of poisons ..	1 —	..	—	—	—	—	—	—	—	—	—
AN 150	All other and unspecified effects of external causes ..	181 84	..	59 43	18 4	4 —	30 6	21 21	15 —	2 1	20 2	1 3
												9 5

Table LXXXVI. Deaths of pedestrians, pedal cyclists, motorcyclists, motor vehicle occupants, and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents, and other road vehicle accidents, by sex, 1941-45, 1946-49, and 1949 to 1957, England and Wales

	1941-45 (annual average)		1946-49 (annual average)		1949		1950		1951		1952		1953		1954		1955		1956		1957	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>Pedestrians:</b>																						
Motor vehicle traffic accidents	2,073	898	1,295	706	1,214	674	1,140	726	1,302	725	1,099	663	1,182	674	1,201	807	1,210	813	1,275	844	1,219	753
Motor vehicle non-traffic accidents					13	2	32	6	43	10	54	8	32	10	55	8	52	9	47	9	40	6
Other road vehicle accidents ..	166	70	79	47	67	51	76	51	59	43	73	31	48	26	57	27	43	31	45	29	38	22
<b>Pedal cyclists:</b>																						
Motor vehicle traffic accidents	557	140	464	86	496	78	475	80	473	80	443	74	461	73	457	79	437	84	458	67	428	68
Motor vehicle non-traffic accidents					—	—	1	—	—	—	—	—	—	—	—	—	1	—	1	—	2	—
Other road vehicle accidents ..	230	51	159	29	157	30	168	31	160	18	125	31	113	30	126	23	131	19	101	9	126	21
<b>Motorcyclists:</b>																						
Motor vehicle traffic accidents	651	27	659	48	733	56	979	79	1,019	94	1,002	78	1,040	95	1,049	70	1,179	89	1,132	88	1,179	96
Motor vehicle non-traffic accidents					6	—	7	—	3	—	10	1	10	1	8	—	18	—	5	—	5	—
<b>Motor vehicle occupants and others:</b>																						
Motor vehicle traffic accidents	762	167	549	155	498	118	505	150	499	200	469	143	542	179	582	202	726	270	790	285	782	302
Motor vehicle non-traffic accidents					50	1	48	2	57	5	70	3	75	1	71	—	33	2	31	4	18	—
Other road vehicle accidents ..	47	11	26	6	32	7	50	13	19	7	31	14	20	10	15	10	17	6	11	5	6	7



## Suicides

There were 3,170 male and 2,145 female deaths attributed to suicide in 1957, compared with an average over the previous five years of 3,049 and 1,835 respectively. In 1957 the "all ages" rates per million were 146 for males and 92 for females. Domestic gas was employed by 42 per cent of the male and 56 per cent of the female suicides; the "all ages" rates for suicide, using this agent, were 65 and 52 per million respectively.

**Table LXXXVII. Suicide: Death rates per million living, by sex and age, and comparative mortality indices by sex, 1901-1945, and 1946 to 1957, England and Wales**

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	C.M.I.* (1938 =1·00)
<b>Males</b>												
1901-10 .. ..	157	1	4	36	91	152	252	397	523	508	382	1·17
1911-20 .. ..	130	—	3	32	69	122	196	278	389	405	350	0·90
1921-30 .. ..	166	—	2	31	78	111	211	346	487	513	438	1·04
1931-35 .. ..	196	0	2	40	96	140	210	379	542	533	483	1·14
1936-40 .. ..	172	—	2	32	89	118	177	284	462	477	466	0·95
1941-45 .. ..	126	—	3	43	72	100	128	185	271	347	382	0·66
1946 .. ..	138	—	5	31	49	94	154	200	300	391	465	0·72
1947 .. ..	136	—	3	35	59	94	123	209	314	382	480	0·71
1948 .. ..	144	—	2	29	74	86	134	219	338	469	388	0·76
1949 .. ..	144	—	1	32	60	80	134	236	334	422	490	0·76
1950 .. ..	136	—	1	30	60	70	122	222	323	416	421	0·71
1951 .. ..	135	—	6	24	53	78	120	213	303	410	477	0·70
1952 .. ..	132	—	1	34	55	78	120	198	320	389	413	0·69
1953 .. ..	142	—	1	28	67	89	126	222	325	411	480	0·74
1954 .. ..	149	—	3	26	59	93	145	235	340	430	439	0·78
1955 .. ..	143	—	4	26	54	97	130	213	322	422	463	0·74
1956 .. ..	149	—	2	25	65	94	130	221	350	426	490	0·77
1957 .. ..	146	—	2	27	60	94	135	217	344	404	475	0·75
<b>Females</b>												
1901-10 .. ..	49	—	3	34	45	56	81	109	108	88	49	0·75
1911-20 .. ..	47	—	2	30	41	50	74	100	102	81	52	0·69
1921-30 .. ..	63	—	1	25	43	57	87	135	143	108	63	0·84
1931-35 .. ..	80	—	0	23	49	77	108	154	166	134	84	1·01
1936-40 .. ..	79	—	1	14	38	65	99	155	169	142	89	0·98
1941-45 .. ..	62	—	1	9	22	52	77	108	128	117	73	0·74
1946 .. ..	74	—	1	15	26	53	87	135	157	146	92	0·89
1947 .. ..	76	—	—	10	28	51	80	134	160	166	114	0·90
1948 .. ..	78	—	—	11	20	50	80	141	183	173	98	0·93
1949 .. ..	75	—	1	15	26	45	77	127	165	165	138	0·89
1950 .. ..	70	—	1	10	23	34	75	124	157	153	115	0·82
1951 .. ..	72	—	—	9	20	38	66	135	160	167	105	0·84
1952 .. ..	68	—	1	11	12	35	66	118	154	164	97	0·79
1953 .. ..	76	—	3	10	22	39	79	127	167	171	127	0·89
1954 .. ..	81	—	—	12	23	52	77	135	167	198	130	0·95
1955 .. ..	84	—	1	7	19	45	75	148	190	201	126	0·97
1956 .. ..	90	—	1	11	27	49	71	156	203	217	141	1·04
1957 .. ..	92	—	1	12	30	47	80	145	214	230	136	1·06

\* C.M.I.s are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table LXXXVII (page 169) shows the long-term trend in suicide rates by sex and age since 1901. From 1949 onwards the male rates in each year have increased with age, the highest rate occurring in men aged 75 and over. The highest female rate has occurred at ages 65-74 each year from 1951 onwards. The male rates at ages 45 and over were somewhat lower in 1957 than in the previous year. Female rates in the age-groups 55-64 and 65-74 increased during 1952-57 from 154 to 214 and from 164 to 230 respectively.

The sex-ratios of male to female rates in corresponding age-groups in 1957 were :

20-	25-	35-	45-	55-	65-	75 and over
2.0	2.0	1.7	1.5	1.6	1.8	3.5

**Table LXXXVIII. Suicide: Proportions per 1,000 deaths according to external agent, by sex and age, 1953-57, England and Wales**

	Males					Females				
	All ages 15 and over	15-	35-	55-	75 and over	All ages 15 and over	15-	35-	55-	75 and over
Domestic gas poisoning ..	424	431	429	408	465	560	566	562	556	568
Other poisoning .. ..	126	146	152	111	66	206	193	218	201	198
Hanging or strangulation ..	181	181	171	192	169	64	63	66	64	60
Drowning .. .. .	87	41	73	106	124	105	68	97	119	105
Firearms or explosives ..	65	85	70	62	40	5	15	7	2	3
Cutting and piercing instruments .. . . .	50	26	38	61	82	14	16	11	17	12
Jumping from high place ..	22	23	20	21	31	26	29	22	26	43
Other agents .. ..	44	68	48	38	22	19	49	18	15	11
<b>Total .. .. .</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>
Total number of suicides ..	15,608	2,065	5,488	6,525	1,530	9,759	977	3,526	4,520	736

Table LXXXVIII (above) shows, for the years 1953-57, the proportions in which various external agents were used by persons committing suicide. Poisoning by domestic gas was the most common means used, the proportion per 1,000 deaths by suicide varying between 408 and 465 among men in the age-groups shown, and among women between 556 and 568. Other forms of poisoning also were used by women more than men, so that for all forms of poisoning the proportion per 1,000 deaths by suicide was 776 for women as compared with 550 for men. Proportionately more men than women resorted to hanging and strangulation, firearms and explosives, and cutting and piercing instruments.

**Table LXXXIX. Suicide: Deaths by sex, age and marital condition, 1957, England and Wales**

	Persons	Males					Females				
		Total	Single	Married	Widowed and divorced	Not stated	Total	Single	Married	Widowed and divorced	Not stated
All ages ..	5,315	3,170	324	915	249	1,682	2,145	409	1,109	620	7
10-14 ..	4	3	3	—	—	—	1	1	—	—	—
15-19 ..	53	37	33	—	—	4	16	16	—	—	—
20-24 ..	122	81	30	15	—	36	41	22	18	—	1
25-29 ..	203	134	33	22	—	79	69	23	42	4	—
30-34 ..	225	150	29	47	2	72	75	15	55	3	2
35-39 ..	313	195	18	57	4	116	118	20	96	2	—
40-44 ..	365	226	16	80	7	123	139	24	98	16	1
45-49 ..	511	315	34	112	11	158	196	41	130	24	1
50-54 ..	646	367	30	131	15	191	279	36	190	52	1
55-59 ..	736	428	35	161	26	206	308	53	178	77	—
60-64 ..	630	350	23	106	29	192	280	60	135	85	—
65-69 ..	573	316	16	88	33	179	257	46	99	112	—
70-74 ..	453	248	15	53	45	135	205	30	48	127	—
75-79 ..	309	197	6	28	41	122	112	11	16	84	1
80-84 ..	125	86	3	14	24	45	39	10	3	26	—
85-89 ..	43	34	—	1	12	21	9	1	1	7	—
90-94 ..	3	2	—	—	—	2	1	—	—	1	—
95 and over	1	1	—	—	—	1	—	—	—	—	—

In Table LXXXIX (above) deaths from suicide in 1957 are analysed by sex, age, and marital status. It has been noticed that in England and Wales single and divorced people have considerably higher admission rates to mental hospitals than widowed people, and the rate is lowest among married people. If social isolation is a factor contributing to the higher admission rates of single and divorced persons, it seems likely that it may influence suicide rates also. For intercensal years the distributions of widowed and divorced people in the general population are not known, so that separate suicide rates cannot be produced for the two groups. Also, the marital status of 1,682 male suicides out of 3,170 was not stated, so that death rates by marital status would have little meaning (see page 45). The suicide rates for females per million total population are shown in Table XC (page 172). In each age-group the rate for single women exceeded that for the married. The rates for widowed and divorced women at ages 25-44, being based on small numbers of deaths, must be treated with reserve. At ages 45 and over, the rates for both the single and the widowed and divorced groups exceeded those for married women, and except at ages 60-69 the rates were highest among the widowed and divorced.



**Table XC. Suicide: Death rates of females by age and marital condition per million total population, 1957, England and Wales**

	Total	Single	Married	Widowed and divorced
<b>15 and over ..</b>	<b>92</b>	<b>45</b>	<b>96</b>	<b>238</b>
15-19 ..	12	12	—	—
20-24 ..	30	37	24	—
25-29 ..	47	87	35	444
30-34 ..	48	87	42	107
35-39 ..	73	117	69	39
40-44 ..	86	151	72	198
45-49 ..	118	197	97	222
50-54 ..	174	161	156	325
55-59 ..	211	259	176	317
60-64 ..	218	317	174	264
65-69 ..	232	274	187	273
70-74 ..	227	219	146	291
75 and over	136	113	85	157

#### **Accidents in the home and residential institutions**

There were 6,667 deaths due to accidents in the home or in residential institutions in 1957, 2,419 male and 4,248 female. They formed 19 per cent of the male and 49 per cent of the female deaths due to accidents and violence.

Table XCI (page 173) shows the numbers of deaths which were assigned to accidents in the home or in residential institutions in 1956 and 1957, and the death rates per million living. The highest rates occurred among persons aged 75 and over, not only for all such accidents combined, but also for each type of accident shown in the table, although not for the residual group of "other" accidents. For all types of domestic accident together, the death rate in this age-group was 5.3 times as high for males as it was at ages 65-74, and 6.9 times for females.

In 1957 there were 736 deaths assigned to burns and scalds, 644 of which were due to accidents which happened at home or in a residential institution. Altogether in the five years 1953-57 there were 3,377 such deaths. In 1957 there were 90 deaths of children under 5 and 250 deaths of people aged 75 and over assigned to burns and scalds received on domestic premises.

Table XCII (page 174) shows the numbers of deaths by month of occurrence during 1952-1957. In 1957 there were 3,583 deaths during the "winter" months of January to March and October to December, compared with 2,870 in the "summer" months of April to September. This pattern of "winter" excess was followed in most of the major individual causes. For gas poisoning, for example, the numbers in 1957 were 480 and 249; for falls on the same level, 650 and 585; for suffocation by inhalation and ingestion of food, 191 and 118.

**Table XCI. Accidents in the home and residential institutions : Deaths and death rates per million living, by sex and age, 1956 and 1957, England and Wales**

Year	Age	All accidents in the home and residential institutions (E870-E936)		Poisoning by utility (illuminating) gas (E890)		Burns and scalds (E916, E917)		Fall on stairs, from ladders, and from one level to another (E900-E902)		Fall on same level (E903)		Unspecified falls (E904)		Other accidents in the home and residential institutions (rem. E870-E936)	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1956 1957	All ages	2,516	4,392	273	426	215	492	566	735	269	815	553	1,421	640	503
		2,419	4,248	291	431	202	442	529	738	317	947	441	1,193	639	497
	0-4	374	314	6	4	34	71	15	13	1	—	3	1	315	225
	5-14	349	288	1	2	37	53	23	17	—	1	—	3	285	212
	15-44	49	59	8	8	10	45	2	1	—	—	1	—	28	5
	45-64	51	45	4	—	13	31	5	2	—	—	2	1	27	11
	65-74	219	140	49	36	15	30	40	12	1	2	10	5	104	55
	75 and over	226	130	38	18	18	34	43	12	2	2	5	4	120	60
	1956	335	379	69	84	23	52	84	63	17	31	36	32	106	117
	1957	357	388	65	93	28	72	101	50	18	29	24	41	121	103
	1956	401	652	56	72	39	83	122	159	38	102	108	191	38	45
	1957	403	669	61	89	27	81	115	153	64	113	88	173	48	60
1956	1,138	2,848	85	222	94	211	303	487	212	680	395	1,192	49	56	
1957	1,033	2,728	122	229	79	171	242	504	233	802	319	971	38	51	
Death rates per million living															
1956 1957	All ages	117	190	13	18	10	21	26	32	13	35	26	61	30	22
		112	183	13	19	9.3	19	24	32	15	41	20	51	30	21
	0-4	222	196	3.6	2.5	20	44	8.9	8.0	0.6	—	1.8	0.6	187	140
	5-14	204	178	0.6	1.2	22	33	13	10	—	0.6	1.8	1.9	167	131
	15-44	14	18	2.3	2.4	2.8	13	0.6	0.3	—	—	0.3	—	8.0	1.5
	45-64	14	13	1.1	—	3.7	9.2	1.4	0.6	—	—	0.6	0.3	7.6	3.2
	65-74	24	15	5.5	4.0	1.7	3.3	4.5	1.3	0.1	0.2	1.1	0.5	12	6.0
	75 and over	25	14	4.3	2.0	2.0	3.8	4.8	1.3	0.2	0.2	0.6	0.4	13	6.6
	1956	63	64	13	14	4.3	8.7	16	11	3.2	5.2	6.8	5.4	20	20
	1957	66	65	12	15	5.2	12	19	8.3	3.3	4.8	4.4	6.8	22	17
	1956	289	329	40	36	28	42	88	80	27	51	78	96	27	23
	1957	289	333	44	44	19	40	82	76	46	56	63	86	34	30
1956	1,727	2,485	129	194	143	184	460	425	322	593	599	1,040	74	49	
1957	1,533	2,298	181	193	117	144	359	425	346	676	473	818	56	43	

Table XCII. Accidents in the home and residential institutions : Deaths by month of occurrence, 1952-54 and 1955 to 1957, England and Wales

Intl. Classm. No.	Cause of death	PERSONS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
E870-E888	Poisoning .. .. .	1952-54	42	46	48	40	45	44	41	50	53	31	55
		1955	21	15	20	16	15	16	15	12	13	16	13
		1956	15	15	19	20	19	17	18	13	19	21	12
		1957	26	20	23	24	19	19	23	11	27	15	10
E890-E895	Gas poisoning .. .. .	1952-54	230	254	144	131	92	71	79	94	129	184	206
		1955	123	103	112	47	46	37	23	34	55	87	81
		1956	89	128	75	60	42	24	36	36	60	76	80
		1957	87	81	64	63	51	39	26	36	52	100	96
E900	Fall on stairs .. .. .	1952-54	246	234	186	174	159	132	175	168	200	213	306
		1955	106	78	89	58	65	56	60	63	69	83	92
		1956	101	93	98	62	59	45	50	56	66	78	94
		1957	103	71	78	69	59	46	61	57	60	75	74
E901	Fall from ladders .. .. .	1952-54	7	5	14	12	16	14	6	12	21	9	8
		1955	4	4	3	2	7	2	5	4	1	5	3
		1956	2	1	5	3	1	6	3	5	1	4	3
		1957	3	4	3	1	3	4	6	7	2	2	6
E902	Other falls from one level to another .. .. .	1952-54	120	106	101	91	114	87	88	90	98	79	86
		1955	49	34	32	42	25	35	21	22	21	23	36
		1956	35	31	37	28	36	27	30	30	38	37	29
		1957	31	32	38	35	23	33	21	29	38	30	32
E903	Fall on same level .. .. .	1952-54	363	402	344	262	264	278	257	275	318	289	375
		1955	108	90	97	80	69	85	78	78	85	104	99
		1956	96	115	119	87	103	86	95	76	69	72	88
		1957	121	99	110	98	95	83	110	109	119	113	88
E904	Unspecified falls .. .. .	1952-54	301	314	350	294	246	226	217	271	290	293	365
		1955	237	150	224	154	162	121	104	96	128	129	154
		1956	200	248	189	170	151	123	131	139	148	157	195
		1957	191	139	159	129	146	131	93	107	109	125	143
E914	Accident caused by electric current .. .. .	1952-54	12	9	9	9	8	6	16	13	10	14	6
		1955	3	2	1	2	3	2	9	3	1	6	5
		1956	3	3	6	2	2	3	3	3	5	7	6
		1957	4	1	9	6	1	8	3	2	8	4	5
E916	Accident caused by fire and explosion of combustible material .. .. .	1952-54	248	299	164	146	71	79	67	65	109	133	220
		1955	106	81	103	51	35	31	21	16	40	41	75
		1956	86	120	73	54	31	29	16	18	23	55	69
		1957	60	49	58	56	40	33	19	27	48	53	62



E917	..	Accident caused by hot substance, corrosive liquid, steam	1952-54 1955 1956 1957	27 12 19 12	35 9 15 8	30 17 13 4	31 9 11 7	18 10 10 7	28 10 10 8	19 6 4 6	17 5 5 3	14 8 7 2	21 7 9 11	37 6 9 8	25 8 7 5
E921	..	Inhalation and ingestion of food .. ..	1952-54 1955 1956 1957	110 36 41 39	107 31 31 23	110 40 48 37	107 27 34 19	85 22 24 18	56 23 26 18	54 18 30 26	42 17 22 15	72 20 18 22	85 36 24 28	82 21 24 26	94 46 36 38
E924	..	Accidental mechanical suffocation in bed and cradle	1952-54 1955 1956 1957	76 29 20 13	67 9 26 7	65 16 23 11	54 15 10 18	59 16 17 9	57 14 13 12	44 15 10 18	48 10 18 16	38 16 10 14	52 17 19 13	47 21 25 17	75 21 14 11
E929	..	Drowning and submersion .. ..	1952-54 1955 1956 1957	8 — 5 3	9 2 4 4	10 4 6 8	18 9 6 5	13 5 9 11	21 8 9 14	13 5 5 5	13 6 6 8	19 3 6 7	15 4 7 3	11 4 7 5	9 5 5 2
Rem.E870- E936	..	All other accidents .. ..	1952-54 1955 1956 1957	112 30 13 14	206 11 29 11	73 22 24 10	72 21 20 17	61 12 26 22	45 16 22 24	47 19 11 25	47 19 24 24	43 13 15 24	46 14 10 17	42 8 11 20	42 16 11 15
E870-E936		All accidents in the home and residential institutions	1952-54 1955 1956 1957	1,902 864 725 707	2,093 623 859 549	1,648 780 735 612	1,441 533 567 547	1,251 486 533 504	1,143 455 448 472	1,158 422 411 465	1,113 393 456 428	1,224 388 432 454	1,447 487 500 535	1,464 550 583 593	1,872 1,654 649 587

**Table XCIII. Accidents in the home and residential institutions : Deaths by cause, sex, and age, 1957, England and Wales**

Intl. Classn. Nos.	Cause of death	All ages	0-	5-	15-	45-	65-	75 and over
E870-E888	Accidental poisoning by solid and liquid substances .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 117 130	$\begin{matrix} 9 \\ 7 \end{matrix}$	$\begin{matrix} 1 \\ 1 \end{matrix}$	$\begin{matrix} 27 \\ 32 \end{matrix}$	$\begin{matrix} 52 \\ 55 \end{matrix}$	$\begin{matrix} 19 \\ 22 \end{matrix}$	$\begin{matrix} 9 \\ 13 \end{matrix}$
E871 ..	Accidental poisoning by barbituric acid and derivatives .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 66 87	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} 17 \\ 18 \end{matrix}$	$\begin{matrix} 34 \\ 45 \end{matrix}$	$\begin{matrix} 13 \\ 18 \end{matrix}$	$\begin{matrix} 2 \\ 6 \end{matrix}$
E872 ..	Accidental poisoning by aspirin and salicylates .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 12 12	$\begin{matrix} 3 \\ 2 \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} 2 \\ 3 \end{matrix}$	$\begin{matrix} 6 \\ 2 \end{matrix}$	$\begin{matrix} — \\ 3 \end{matrix}$	$\begin{matrix} 1 \\ 2 \end{matrix}$
E890-E895	Accidental poisoning by gases and vapours .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 322 446	$\begin{matrix} 2 \\ 3 \end{matrix}$	$\begin{matrix} 4 \\ — \end{matrix}$	$\begin{matrix} 49 \\ 22 \end{matrix}$	$\begin{matrix} 76 \\ 96 \end{matrix}$	$\begin{matrix} 66 \\ 93 \end{matrix}$	$\begin{matrix} 125 \\ 232 \end{matrix}$
E900 ..	Fall on stairs .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 324 515	$\begin{matrix} 5 \\ 1 \end{matrix}$	$\begin{matrix} 1 \\ — \end{matrix}$	$\begin{matrix} 19 \\ 5 \end{matrix}$	$\begin{matrix} 70 \\ 37 \end{matrix}$	$\begin{matrix} 72 \\ 115 \end{matrix}$	$\begin{matrix} 157 \\ 357 \end{matrix}$
E901 ..	Fall from ladders .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 36 8	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} 3 \\ — \end{matrix}$	$\begin{matrix} 14 \\ 1 \end{matrix}$	$\begin{matrix} 12 \\ 3 \end{matrix}$	$\begin{matrix} 7 \\ 4 \end{matrix}$
E902 ..	Other falls from one level to another ..	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 169 215	$\begin{matrix} 18 \\ 16 \end{matrix}$	$\begin{matrix} 4 \\ 2 \end{matrix}$	$\begin{matrix} 21 \\ 7 \end{matrix}$	$\begin{matrix} 17 \\ 12 \end{matrix}$	$\begin{matrix} 31 \\ 35 \end{matrix}$	$\begin{matrix} 78 \\ 143 \end{matrix}$
E903 ..	Fall on same level .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 317 947	$\begin{matrix} — \\ 1 \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} 2 \\ 2 \end{matrix}$	$\begin{matrix} 18 \\ 29 \end{matrix}$	$\begin{matrix} 64 \\ 113 \end{matrix}$	$\begin{matrix} 233 \\ 802 \end{matrix}$
E904 ..	Unspecified falls .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 441 1,193	$\begin{matrix} 3 \\ 3 \end{matrix}$	$\begin{matrix} 2 \\ 1 \end{matrix}$	$\begin{matrix} 5 \\ 4 \end{matrix}$	$\begin{matrix} 24 \\ 41 \end{matrix}$	$\begin{matrix} 88 \\ 173 \end{matrix}$	$\begin{matrix} 319 \\ 971 \end{matrix}$
E914 ..	Accident caused by electric current ..	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 37 19	$\begin{matrix} 8 \\ 1 \end{matrix}$	$\begin{matrix} 6 \\ — \end{matrix}$	$\begin{matrix} 20 \\ 8 \end{matrix}$	$\begin{matrix} 3 \\ 8 \end{matrix}$	$\begin{matrix} — \\ 1 \end{matrix}$	$\begin{matrix} — \\ 1 \end{matrix}$
E916 ..	Accident caused by fire and explosion of combustible material .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 169 391	$\begin{matrix} 20 \\ 42 \end{matrix}$	$\begin{matrix} 12 \\ 31 \end{matrix}$	$\begin{matrix} 16 \\ 32 \end{matrix}$	$\begin{matrix} 27 \\ 66 \end{matrix}$	$\begin{matrix} 23 \\ 70 \end{matrix}$	$\begin{matrix} 71 \\ 150 \end{matrix}$
	Burns by clothing .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 40 261	$\begin{matrix} 4 \\ 30 \end{matrix}$	$\begin{matrix} 4 \\ 23 \end{matrix}$	$\begin{matrix} 4 \\ 22 \end{matrix}$	$\begin{matrix} 7 \\ 46 \end{matrix}$	$\begin{matrix} 6 \\ 45 \end{matrix}$	$\begin{matrix} 15 \\ 95 \end{matrix}$
	from domestic fire (open) .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 8 101	$\begin{matrix} 1 \\ 10 \end{matrix}$	$\begin{matrix} 2 \\ 18 \end{matrix}$	$\begin{matrix} 1 \\ 13 \end{matrix}$	$\begin{matrix} — \\ 15 \end{matrix}$	$\begin{matrix} 2 \\ 19 \end{matrix}$	$\begin{matrix} 2 \\ 26 \end{matrix}$
	gas fire, stove, etc. .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 4 42	$\begin{matrix} 1 \\ 3 \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ 2 \end{matrix}$	$\begin{matrix} 1 \\ 9 \end{matrix}$	$\begin{matrix} — \\ 7 \end{matrix}$	$\begin{matrix} 2 \\ 21 \end{matrix}$
	electric fire .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 5 44	$\begin{matrix} 1 \\ 2 \end{matrix}$	$\begin{matrix} — \\ 2 \end{matrix}$	$\begin{matrix} — \\ 1 \end{matrix}$	$\begin{matrix} 1 \\ 11 \end{matrix}$	$\begin{matrix} 2 \\ 8 \end{matrix}$	$\begin{matrix} 1 \\ 20 \end{matrix}$
	other specified .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 20 52	$\begin{matrix} 1 \\ 11 \end{matrix}$	$\begin{matrix} 2 \\ 1 \end{matrix}$	$\begin{matrix} 2 \\ 4 \end{matrix}$	$\begin{matrix} 5 \\ 9 \end{matrix}$	$\begin{matrix} 2 \\ 8 \end{matrix}$	$\begin{matrix} 8 \\ 19 \end{matrix}$
	not specified .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 3 22	$\begin{matrix} — \\ 4 \end{matrix}$	$\begin{matrix} — \\ 2 \end{matrix}$	$\begin{matrix} 1 \\ 2 \end{matrix}$	$\begin{matrix} — \\ 2 \end{matrix}$	$\begin{matrix} — \\ 3 \end{matrix}$	$\begin{matrix} 2 \\ 9 \end{matrix}$
	Burns by falling into fire .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 28 29	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ 3 \end{matrix}$	$\begin{matrix} 1 \\ 1 \end{matrix}$	$\begin{matrix} 5 \\ 10 \end{matrix}$	$\begin{matrix} 22 \\ 15 \end{matrix}$
	Burns by conflagration .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 57 70	$\begin{matrix} 10 \\ 11 \end{matrix}$	$\begin{matrix} 6 \\ 8 \end{matrix}$	$\begin{matrix} 8 \\ 6 \end{matrix}$	$\begin{matrix} 13 \\ 12 \end{matrix}$	$\begin{matrix} 6 \\ 13 \end{matrix}$	$\begin{matrix} 14 \\ 20 \end{matrix}$
	Burns by other specified means .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 44 31	$\begin{matrix} 6 \\ 1 \end{matrix}$	$\begin{matrix} 2 \\ — \end{matrix}$	$\begin{matrix} 4 \\ 1 \end{matrix}$	$\begin{matrix} 6 \\ 7 \end{matrix}$	$\begin{matrix} 6 \\ 2 \end{matrix}$	$\begin{matrix} 20 \\ 20 \end{matrix}$
	Burns by means not specified .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ — —	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$
E917 ..	Accident caused by hot substance, corrosive liquid, and steam .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 33 51	$\begin{matrix} 17 \\ 11 \end{matrix}$	$\begin{matrix} 1 \\ — \end{matrix}$	$\begin{matrix} 2 \\ 2 \end{matrix}$	$\begin{matrix} 1 \\ 6 \end{matrix}$	$\begin{matrix} 4 \\ 11 \end{matrix}$	$\begin{matrix} 8 \\ 21 \end{matrix}$
E921 ..	Inhalation and ingestion of food causing obstruction or suffocation ..	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 186 135	$\begin{matrix} 120 \\ 80 \end{matrix}$	$\begin{matrix} 1 \\ 5 \end{matrix}$	$\begin{matrix} 19 \\ 7 \end{matrix}$	$\begin{matrix} 22 \\ 16 \end{matrix}$	$\begin{matrix} 13 \\ 15 \end{matrix}$	$\begin{matrix} 11 \\ 12 \end{matrix}$
E924 ..	Accidental mechanical suffocation in bed or cradle .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 91 74	$\begin{matrix} 87 \\ 71 \end{matrix}$	$\begin{matrix} 1 \\ — \end{matrix}$	$\begin{matrix} 2 \\ 2 \end{matrix}$	$\begin{matrix} 1 \\ 1 \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$	$\begin{matrix} — \\ — \end{matrix}$
E929 ..	Accidental drowning and submersion ..	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 34 40	$\begin{matrix} 15 \\ 15 \end{matrix}$	$\begin{matrix} 1 \\ — \end{matrix}$	$\begin{matrix} 3 \\ 3 \end{matrix}$	$\begin{matrix} 5 \\ 9 \end{matrix}$	$\begin{matrix} 5 \\ 10 \end{matrix}$	$\begin{matrix} 5 \\ 3 \end{matrix}$
Rem. E870-E936	Other accidents .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 143 84	$\begin{matrix} 45 \\ 37 \end{matrix}$	$\begin{matrix} 17 \\ 5 \end{matrix}$	$\begin{matrix} 38 \\ 4 \end{matrix}$	$\begin{matrix} 27 \\ 11 \end{matrix}$	$\begin{matrix} 6 \\ 8 \end{matrix}$	$\begin{matrix} 10 \\ 19 \end{matrix}$
E870-E936	All accidents in the home and residential institutions .. .. .	$\begin{matrix} \text{M} \\ \text{F} \end{matrix}$ 2,419 4,248	$\begin{matrix} 349 \\ 288 \end{matrix}$	$\begin{matrix} 51 \\ 45 \end{matrix}$	$\begin{matrix} 226 \\ 130 \end{matrix}$	$\begin{matrix} 357 \\ 388 \end{matrix}$	$\begin{matrix} 403 \\ 669 \end{matrix}$	$\begin{matrix} 1,033 \\ 2,728 \end{matrix}$

Table XCIII (above) analyses the numbers of deaths due to accidents in the home and residential institutions by sex-age groups. Among children under 5 the principal causes of death were inhalation and ingestion of food causing

obstruction and suffocation, and accidental mechanical suffocation in bed or cradle ; between them they accounted for the deaths of 207 boys and 151 girls, 59 and 52 per cent, respectively, of the total. The percentage distribution by cause at ages 15 and over was as follows :

Causes of accidental death	15-		45-		65-		75 and over	
	M	F	M	F	M	F	M	F
Poisoning (including gas) ..	34	41	36	39	21	17	13	9
Falls .. .. .	22	14	40	31	66	66	77	83
Burns and scalds .. .. .	8	26	8	19	7	12	8	6
Suffocation (by food, or mechanical) .. .. .	9	7	6	4	3	2	1	0
Other causes .. .. .	27	12	10	7	3	3	1	2
<b>Total .. .. .</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The proportion of male deaths due to accidental burns and scalds was roughly the same at different ages, but the proportion of female deaths declined with increasing age. The proportion of deaths of both sexes due to poisoning was much lower at 65 and over than at 15-64 years. The proportion of fatal falls increased with age reaching, at 75 and over, 77 per cent for males and 84 per cent for females.

**Table XCIV. Accidents in the home and residential institutions : Deaths by cause and sex at age 65 and over, 1957, England and Wales**

Intl. Classn. Nos.	Cause of death	Home			Residential institutions		
		Males	Females	Persons	Males	Females	Persons
<b>E870-E888</b>	<b>Accidental poisoning by solid and liquid substances .. .. .</b>	<b>28</b>	<b>33</b>	<b>61</b>	<b>—</b>	<b>2</b>	<b>2</b>
E871 ..	Accidental poisoning by barbituric acid and derivatives .. .. .	15	23	38	—	1	1
E883 ..	Accidental poisoning by corrosive aromatics, acids, and caustic alkalis .. .. .	1	2	3	—	—	—
Rem. E870-E888	Accidental poisoning by other solid and liquid substances .. .. .	12	8	20	—	1	1
<b>E890-E895</b>	<b>Accidental poisoning by gases and vapours .. .. .</b>	<b>191</b>	<b>323</b>	<b>514</b>	<b>—</b>	<b>2</b>	<b>2</b>
E890 ..	Accidental poisoning by utility (illuminating) gas .. .. .	183	316	499	—	2	2
Rem. E890-E895	Accidental poisoning by other gases and vapours .. .. .	8	7	15	—	—	—
<b>E900-E904</b>	<b>Accidental falls .. .. .</b>	<b>835</b>	<b>2,182</b>	<b>3,017</b>	<b>226</b>	<b>534</b>	<b>760</b>
E900 ..	Fall on stairs .. .. .	217	451	668	12	21	33
E901 ..	Fall from ladders .. .. .	18	7	25	1	—	1
E902 ..	Other falls from one level to another .. .. .	80	110	190	29	68	97
E903 ..	Fall on same level .. .. .	193	648	841	104	267	371
E904 ..	Unspecified falls .. .. .	327	966	1,293	80	178	258
<b>E910-E936</b>	<b>Other accidents .. .. .</b>	<b>134</b>	<b>297</b>	<b>431</b>	<b>22</b>	<b>24</b>	<b>46</b>
E916 ..	Accident caused by fire and explosion of combustible material .. .. .	89	217	306	5	3	8
E917 ..	Accident caused by hot substance, corrosive liquid, and steam .. .. .	11	29	40	1	3	4
E921 ..	Inhalation and ingestion of food causing obstruction or suffocation .. .. .	15	19	34	9	8	17
E929 ..	Accidental drowning and submersion .. .. .	9	13	22	1	—	1
Rem. E910-E936	Remainder of other accidents .. .. .	10	19	29	6	10	16
<b>E870-E936</b>	<b>All accidents in the home and residential institutions .. .. .</b>	<b>1,188</b>	<b>2,835</b>	<b>4,023</b>	<b>248</b>	<b>562</b>	<b>810</b>



Table XCIV (page 177) distinguishes, for people aged 65 and over, deaths due to accidents in the home from those in residential institutions. Two people died from accidental gas poisoning in the latter, compared with 514 at home. Twenty per cent of the fatal falls occurred in residential institutions. As the relative numbers of people living at home or in institutions are not available, the mortality rates for accidental falls cannot be compared.

### Accidental falls

There were 5,296 deaths (1,991 males and 3,305 females) due to accidental falls in 1957. The "all ages" death rate was 92 per million for males and 142 for females; these rates were a slight improvement on those of 99 and 149 for 1956.

**Table XCV. Accidental falls: Death rates per million living, by sex and age, and comparative mortality indices by sex, 1901-1945, and 1946 to 1957, England and Wales**

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	C.M.I.† (1938 = 1.00)
<b>Males</b>												
1901-10 .. ..	84	45	25	23	24	39	69	119	209	420	1,253	1.06
1911-20 .. ..	107	38	30	39	36	56	93	155	254	454	1,373	1.29
1921-30 .. ..	85	25	18	31	31	37	56	93	161	352	1,306	0.92
1931-35 .. ..	93	25	18	31	33	37	47	79	146	338	1,609	0.92
1936-40 .. ..	120	31	24	34	40	51	58	95	177	414	1,910	1.05
1941-45 .. ..	109	35	26	40	30	41	58	87	157	337	1,448	0.93
1946 .. ..	86	27	21	25	26	30	43	57	107	245	1,203	0.73
1947 .. ..	97	31	26	33	42	36	50	68	108	254	1,352	0.80
1948 .. ..	80	27	22	22	27	37	41	49	85	211	1,122	0.66
1949 .. ..	78	20	18	28	31	33	38	57	68	185	1,162	0.63
1949* .. ..	79	25	18	27	28	32	35	55	71	191	1,174	0.66
1950* .. ..	74	14	18	19	25	29	34	50	71	183	1,139	0.61
1951* .. ..	86	17	17	17	34	35	40	51	85	241	1,275	0.71
1952* .. ..	79	16	17	23	30	30	30	47	78	221	1,169	0.64
1953* .. ..	84	14	10	22	29	30	33	52	80	246	1,254	0.68
1954* .. ..	99	11	9	20	23	27	39	52	86	280	1,659	0.80
1955* .. ..	94	14	16	13	25	28	38	44	85	248	1,574	0.75
1956* .. ..	99	9	15	16	31	25	34	45	77	281	1,698	0.78
1957* .. ..	92	15	13	20	21	23	29	47	78	262	1,491	0.73
<b>Females</b>												
1901-10 .. ..	68	27	6	4	4	10	26	64	132	389	1,657	0.88
1911-20 .. ..	69	20	6	5	5	8	20	50	108	356	1,752	0.83
1921-30 .. ..	73	13	4	4	4	5	10	31	85	318	1,845	0.75
1931-35 .. ..	100	14	5	3	3	6	8	30	92	388	2,283	0.90
1936-40 .. ..	136	18	6	4	5	6	12	34	123	476	2,714	1.11
1941-45 .. ..	118	17	8	5	6	6	11	26	81	346	2,135	0.85
1946 .. ..	110	15	4	3	5	6	6	11	59	260	2,037	0.76
1947 .. ..	111	11	7	9	4	4	5	15	58	286	1,947	0.75
1948 .. ..	100	11	4	4	4	3	4	18	51	231	1,726	0.66
1949 .. ..	105	10	6	3	2	2	4	13	50	232	1,840	0.69
1949* .. ..	105	12	6	4	1	2	5	15	51	230	1,822	0.69
1950* .. ..	113	8	2	2	1	3	5	14	45	230	1,994	0.73
1951* .. ..	117	9	—	2	5	3	3	12	46	240	2,034	0.75
1952* .. ..	105	9	2	2	5	2	5	11	44	218	1,743	0.66
1953* .. ..	123	7	4	2	2	4	5	15	50	241	2,018	0.75
1954* .. ..	141	6	3	3	1	3	5	13	45	295	2,249	0.83
1955* .. ..	144	8	3	2	—	2	6	15	50	281	2,261	0.83
1956* .. ..	149	8	3	2	4	2	5	13	50	275	2,338	0.85
1957* .. ..	142	9	2	1	2	2	5	14	40	250	2,178	0.79

\* According to the Sixth Revision of the International Classification (Nos. E900-E904). Other years according to the classification in use at the time.

† C.M.I.s are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table XCV (page 178) shows the death rates per million by sex-age groups.

**Table XCVI. Accidental falls: Annual average of deaths and percentage distribution by place of occurrence, 1953-57, England and Wales**

Cause of death (and I.S.C. Nos.)	Total	Home*	Farm, mine or industrial premises	Place for recreation and sport	Other places
Fall from one level to another (E900-E902) { Deaths Per cent of total	1,737 100	1,263 73	233 13	16 1	225 13
Fall on same level (E903) { Deaths Per cent of total	1,575 100	1,190 76	8 1	7 —	370 23
Unspecified falls (E904) .. { Deaths Per cent of total	1,902 100	1,602 84	17 1	2 —	281 15

\* i.e. Homes and residential institutions.

Table XCVI (above) shows how deaths from accidental falls during 1953-57 were distributed according to place of occurrence.

## MISCELLANEOUS

### Infectious diseases—deaths occurring a long period after onset of disease

The rules for classification, given in the *International Statistical Classification of Diseases, Injuries and Causes of Death*, 1948, state that "when an acute infective disease classified in categories 040-043, 050, 055, 056, 058, 084-087, 100-108 is certified as the underlying cause of some other condition and the interval between its onset and death is stated to be one year or more, it is recommended that such deaths should be appropriately identified in tabulation". This practice is followed in England and Wales, and the deaths in question in 1957 are tabulated separately below. Five infectious diseases are involved: typhoid fever (2 deaths), scarlet fever (7 deaths), diphtheria (2 deaths), whooping cough (1 death), and measles (1 death).

Age at death	Interval between onset of infectious disease and death (years)					
	1-4	5-9	10-19	20-29	30-39	40 and over
Typhoid fever (040)						
65 and over ..	—	—	1	—	—	1
Scarlet fever (050)						
15-44 .. ..	—	—	3	—	—	—
45-64 .. ..	—	—	—	—	—	3
65 and over ..	—	—	—	—	—	1
Diphtheria (055)						
65 and over ..	—	—	—	—	—	2
Whooping cough (056)						
15-44 .. ..	—	—	—	—	1	—
Measles (085)						
5-14 .. ..	—	1	—	—	—	—



Details of age, sex, other conditions on the death certificate, and the interval (in years) since the onset of the infectious disease are :

Age	Sex	Associated conditions	Interval (in years) since onset of infectious disease
<b>Typhoid fever</b>			
70	F	Intestinal obstruction; plastic peritonitis; adhesions ..	About 10
79	F	Suppurative cholangitis; empyaema of gallbladder, chronic cholecystitis, cholelithiasis .. .. .	59
<b>Scarlet fever</b>			
25	M	Chronic nephritis .. .. .	10
31	M	Chronic nephritis and hypertension .. .. .	17
32	F	Left ventricular failure; aortic stenosis .. .. .	15
61	F	Congestive heart failure; mitral stenosis .. .. .	50
62	M	Uraemia; chronic nephritis .. .. .	45
64	F	Myocardial failure; mitral stenosis .. .. .	48
75	F	Myocardial degeneration; valvular disease of heart ..	In childhood
<b>Diphtheria</b>			
68	F	Bronchiectasis; tracheal stenosis; rheumatoid arthritis	As a child
75	F	Cardiac failure; valvular disease of heart; hemiplegia; cerebral embolism .. .. .	Years ago
<b>Whooping cough</b>			
41	M	Bronchopneumonia; bronchiectasis; collapsed left lower lobe of lung; rheumatic heart disease; old inflammatory stenosis of the bronchus .. .. .	In childhood
<b>Measles</b>			
9	M	Bronchiectasis and pulmonary emphysema following post-morbilliform pneumonia .. .. .	5

### Deaths following vaccination or other prophylactic inoculation

This section includes deaths classified to E940-E942, vaccinia, post-vaccinal encephalitis, and other complications of smallpox vaccination, and to E943, E944, post-immunization jaundice and hepatitis, and other complications of prophylactic inoculation. Deaths classified to some other condition as the underlying cause, but with vaccination either mentioned on the certificate or ascertained by enquiry to have been associated with the death, are also included here.

In 1957 nine deaths were assigned to complications of vaccination against smallpox :

1. Female aged 7 weeks certified as post-vaccinal encephalitis.
2. Male aged 4 months certified as vaccinal encephalitis. There was, however, no evidence of encephalitis on pathological examination.
3. Male aged 5 months certified as Kaposi's varicelliform eruptions associated with vaccination.
4. Female aged 5 months certified as uraemia due to acute type I nephritis following vaccination, with agammaglobulinaemia as a contributory factor.

5. Female aged 5 months certified as tracheitis and pneumonitis due to dehydration from vomiting. Gastro-enteritis had caused loss of fluid due to vomiting, and infection had spread causing a tracheitis and pneumonitis. There had been recent vaccination of the left arm, but the connection between this and the gastro-enteritis was not made clear on the certificate.
6. Male aged 6 months certified as staphylococcal pyaemia due to secondary infected vaccinia following vaccination.
7. Female aged 17 months certified as encephalitis due to vaccinia, with infantile eczema as a contributory factor.
8. Male aged 49 years certified as post-vaccinal encephalitis.
9. Female aged 49 years certified as generalised carcinomatosis due to carcinoma of right breast and generalised vaccinia following vaccination.

There were five deaths assigned to complications of other prophylactic inoculations, three following injections of anti-tetanus toxin :

1. Male aged 10 years certified as anaphylactic shock following a prophylactic injection of anti-tetanus serum following a cut on the head.
2. Male aged 14 years certified as cardio-respiratory failure due to aspiration of vomitus due to anaphylactic shock, presumably due to injection of serum following adder bite.
3. Male aged 25 years certified as acute anaphylactic shock resulting from injections of anti-tetanus, or anti-gas gangrene, serum, following laceration of leg.
4. Female aged 25 years certified as anaphylactic shock following the injection of anti-tetanus serum following thumb injury.
5. Female aged 55 years certified as infective carditis due to chronic hepatitis suspected to be due to yellow fever serum administered prophylactically before a visit to the Far East in 1940.

### Tetanus

Deaths from tetanus are assigned to I.S.C. Number 061 when the condition follows vaccination or a slight injury such as a scratch ; if the injury is more serious the death is assigned to the injury. In 1957 there were 28 deaths, 23 male and 5 female, assigned to tetanus, and a further 18 deaths, 13 male and 5 female, where tetanus was mentioned in the statement of cause of death, but which were assigned to other causes. Details of all these deaths are given in Table XCVII (page 183).

**Table XCVII. Deaths due to tetanus, by sex and age, showing cause of tetanus, 1957, England and Wales**

(a) assigned to tetanus (I.S.C. No. 061)

Age	Sex	Cause of tetanus
1 year	M	Scratched wrist in fall
5 years	M	Tetanus*
6 "	M	Scratched eyelid
8 "	M	Splinter in knee
8 "	M	Crushed finger under culvert inspection lid
9 "	M	Grazed knee on tree stump
9 "	F	Grazed knee in fall
11 "	M	Splinter in leg
11 "	M	Leg grazed by stick of wood thrown in play
15 "	M	Tetanus*
19 "	M	Tetanus*
22 "	M	Tetanus*
32 "	M	Nail pierced foot
34 "	M	Piece of metal fell on leg
49 "	M	Tetanus*
50 "	M	Tetanus*
56 "	M	Cut finger
58 "	F	Crushed tip of right middle finger
62 "	M	Inhaled tetanus spores whilst gardening which infected old infarction of left lung
63 "	F	Trod on nail in garden
64 "	M	Thorn entered thumb when sugar beeting
66 "	M	Splinter in thumb whilst at work
68 "	M	Hit finger with hammer whilst working in garden
72 "	M	Tetanus*
74 "	M	Scratched his hands whilst gardening
74 "	F	Tetanus*
80 "	M	Tetanus*
92 "	F	Pricked finger on a rose bush

(b) assigned elsewhere

7 years	F	Fractured and lacerated forearm in fall in garden
8 "	M	Knocked down and run over by a motor bus whilst cycling
10 "	F	Wound in the back of the left thigh from fall from tree onto barbed wire
11 "	M	Burns from fireworks
21 "	M	Lacerated heel in collision with motor car
23 "	M	Amputation of toe by potato harvesting machine
26 "	M	Abrasions and burns to right ear and skull in motor accident
32 "	M	Wound of right ankle accidentally sustained in street affray
43 "	M	Contracted in hospital during appendicectomy
49 "	F	Lacerated right leg in fall at home
52 "	M	Contracted in hospital during operation for haemorrhoids
53 "	M	Following operation for fractured os calcis sustained in fall whilst gardening
54 "	M	Infected teeth
58 "	M	Lacerated hand in motor accident
67 "	F	Cut leg in fall at home
70 "	M	Gangrene of left foot
81 "	F	Cut and abrasion of left hand from fall in garden
82 "	M	Gangrene of right foot

\*No cause stated.



Table XCVIII. Deaths from encephalitis certified as secondary to infectious disease, by underlying cause, sex and age, 1955-57, England and Wales

Intl. Classn. No.	Cause of death	All deaths	Deaths from encephalitis secondary to infectious diseases											
			All ages	0-	1-	2-	3-	4-	5-9	10-14	15-24	25-44	45-64	65 and over
056	Whooping cough .. .. .	{ M 120 F 151	2	1	—	—	1	—	—	—	—	—	—	—
085	Measles .. .. .	{ M 156 F 145	30	4	3	2	4	2	12	2	1	—	—	—
086	Rubella .. .. .	{ M 1 F 2	36	2	5	8	3	5	11	1	1	—	—	—
087	Chickenpox .. .. .	{ M 13 F 22	—	—	—	—	—	—	—	—	—	—	—	—
088	Herpes zoster .. .. .	{ M 66 F 135	4	—	—	2	2	—	—	—	—	—	1	—
089	Mumps .. .. .	{ M 10 F 14	9	—	—	—	—	—	4	2	—	—	—	—
092	Infectious hepatitis .. .. .	{ M 351 F 488	2	—	—	1	—	—	1	—	—	—	1	2
096	Other diseases attributable to viruses .. .. .	{ M 18 F 10	5	—	—	—	—	—	1	—	—	—	—	3
134	Other fungus infections .. .. .	{ M 36 F 20	2	—	—	—	—	—	2	—	—	—	—	1
480	Influenza with pneumonia .. .. .	{ M 3,953 F 3,655	—	—	—	—	—	—	—	—	—	—	—	—
481	Influenza with other respiratory manifestations, and influenza unqualified .. .. .	{ M 2,270 F 2,310	—	—	—	—	—	—	—	—	—	—	—	—
483	Influenza with nervous manifestations, but without digestive or respiratory symptoms .. .. .	{ M 35 F 24	1	—	—	—	—	—	—	—	—	—	—	—
	Total .. .. .	{ M 7,029 F 6,976	13	2	—	1	—	—	2	2	3	1	2	1
			61	6	4	4	5	2	17	8	6	2	4	3
			77	7	6	10	5	6	21	7	1	2	7	5

## Deaths from encephalitis certified as secondary to infectious disease

Table XCVIII (page 184) shows the numbers and sex-age distribution of deaths in which an infectious disease was the underlying cause but where encephalitis was also mentioned. The latter condition may have appeared in Part I of the certificate of cause of death as a complication of the infectious illness or in Part II as a condition contributing to the death. The total numbers of deaths assigned to the infectious diseases in question are shown for comparison. Measles, chickenpox, mumps, and influenza with nervous manifestations were the diseases in which encephalitis occurred most frequently as a secondary cause of death; the proportion of deaths from these diseases in which encephalitis occurred varied from about 1 in every 2 for influenza with nervous manifestations to about 1 in 5 for mumps. Encephalitis was also stated to be a secondary cause in about 1 in every 30 deaths assigned to herpes zoster or whooping cough, but only in 1 out of over 400 of the deaths assigned to infectious hepatitis. The proportion of deaths classified to influenza unqualified or influenza with pneumonia or other respiratory manifestations where encephalitis occurred was relatively insignificant—1 in more than 1,700.

## Deaths in institutions

Table XCIX (page 186) analyses deaths registered in England and Wales in 1957 by sex, cause of death, and the type of place where death took place. Of the total of 514,870 deaths registered, 255,333 (more than 49 per cent) took place in institutions; 211,989 (41 per cent) in hospitals (non-mental) belonging to the National Health Service, 13,356 (less than 1 per cent) in other non-mental hospitals or nursing homes, 14,470 (about 3 per cent) in mental or mental deficiency hospitals belonging to the National Health Service, and 14,928 (3 per cent) in "other institutions", such as homes for the aged, schools, prisons, etc. Of the remainder, 235,640 people (46 per cent of the total deaths) died in their own homes and 23,897 (5 per cent) in other private houses or elsewhere.

Table XCIX. Deaths by cause and sex according to type of institution, etc., in which they occurred, 1957, England and Wales

Cause of death	Intl. Class. No.	Total deaths		Mental hospitals and mental deficiency hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
		M	F	N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.		M	F	M	F	M	F
				M	F	M	F	M	F	M	F						
Infective and parasitic diseases	001-138	266,407	248,463	6,297	8,173	232	358	115,245	96,744	4,396	8,960	6,726	8,202	120,259	115,381	13,252	10,645
Tuberculosis, respiratory system	001-008	5,144	2,588	188	114	2	2	2,564	1,510	56	28	43	20	1,783	842	108	72
Tuberculosis, other forms	010-019	3,150	1,099	110	55	—	—	1,725	589	32	8	23	4	1,213	417	45	29
Syphilis and its sequelae	020-029	264	271	11	11	—	—	203	205	7	7	1	2	40	43	2	2
Gonococcal infection and other venereal diseases	030-039	879	413	47	26	—	—	415	156	5	2	15	6	350	203	47	20
Infectious diseases commonly arising in intestinal tract	040-049	5	1	—	—	—	—	2	—	—	—	—	—	3	1	—	—
Other bacterial diseases	050-064	42	40	1	3	—	—	38	29	—	—	—	—	3	6	—	2
Spirochaetal diseases, except syphilis	070-074	234	223	—	4	—	—	173	166	1	1	1	1	44	43	5	8
Diseases attributable to viruses	080-096	18	3	—	—	—	—	16	—	—	—	—	—	2	2	—	—
Typhus and other rickettsial diseases	100-108	494	479	18	15	—	1	350	325	10	9	2	7	105	109	9	13
Malaria	110-117	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases	120-138	65	58	1	—	—	—	39	39	1	1	1	—	23	17	—	1
Neoplasms	140-239	50,792	44,853	480	604	15	14	24,490	19,778	1,139	1,954	787	895	23,153	19,642	728	1,966
Malignant neoplasm of buccal cavity and pharynx	140-148	1,259	669	13	7	1	—	500	282	31	22	42	25	660	304	12	29
Malignant neoplasm of digestive organs and peritoneum	150-159	19,428	17,998	178	212	4	2	8,816	7,475	430	779	323	352	9,355	8,297	322	881
Malignant neoplasm of respiratory system	160-165	17,284	3,002	149	41	4	—	7,956	1,425	313	128	207	47	8,401	1,219	254	142
Malignant neoplasm of breast and genito-urinary organs	170-181	6,615	17,253	54	235	3	9	3,329	6,986	220	821	142	405	2,795	8,052	72	745
Malignant neoplasm of other and unspecified sites	190-199	2,743	2,875	42	56	1	2	1,582	1,575	80	115	44	42	960	999	34	86
Neoplasm of lymphatic and haematopoietic tissues	200-205	2,727	2,164	21	22	1	—	1,805	1,441	45	56	15	13	810	571	30	61
Benign neoplasm	210-229	329	555	9	23	1	1	251	377	6	18	4	8	58	113	—	15
Neoplasm of unspecified nature	230-239	407	357	14	8	—	—	251	217	14	15	10	3	114	87	4	7
Allergic, endocrine system, metabolic, and nutritional diseases	240-289	2,429	4,246	53	109	—	1	1,143	2,102	36	73	46	78	1,082	1,763	69	120
Allergic disorders	240-245	1,011	1,120	10	15	—	1	303	346	10	13	5	11	650	690	33	44
Diseases of thyroid gland	250-254	89	590	3	25	—	—	43	289	2	12	1	14	39	231	1	19
Diabetes mellitus	260	1,013	2,124	23	49	—	—	617	1,231	20	42	35	51	293	703	25	48
Diseases of other endocrine glands	270-277	112	156	8	9	—	—	64	104	3	1	1	1	37	36	3	5
Vitaminoses, and other metabolic diseases	280-289	204	256	9	11	—	—	116	132	1	5	4	1	67	103	7	4
Diseases of the blood and blood-forming organs	290-299	729	1,329	11	18	1	2	454	696	11	25	11	25	232	513	9	50



300-326	347	698	109	181	21	12	139	332	10	19	8	25	57	118	3	11
300-309	259	593	94	164	19	10	105	299	7	15	7	20	25	77	2	8
310-318	14	36	—	3	1	1	4	12	1	2	—	1	9	15	—	2
320-326	74	69	15	14	2	1	30	21	2	2	—	4	23	26	1	1
330-398	33,257	45,959	744	905	44	66	14,540	17,918	755	2,210	1,498	1,850	15,005	21,367	671	1,643
330-334	30,537	43,132	579	728	38	56	13,077	16,472	687	2,066	1,380	1,722	14,171	20,499	605	1,589
340-345	765	801	16	23	—	9	549	529	18	36	20	32	154	173	8	7
350-357	1,774	1,889	145	152	6	1	765	814	49	104	98	94	655	676	56	40
360-369	33	29	1	—	—	—	25	20	—	2	—	—	6	6	—	—
370-379	33	5	—	1	—	—	1	4	—	—	—	—	—	—	—	—
380-389	23	34	—	—	—	—	19	29	—	—	—	—	—	—	—	—
390-398	124	69	3	1	—	—	104	50	1	1	—	1	16	11	1	6
400-468	95,783	92,847	2,912	4,071	95	184	28,676	25,358	1,379	3,321	2,841	3,905	53,144	51,539	6,736	4,469
400-402	78	96	1	—	—	—	56	67	1	—	—	—	13	26	6	3
410-416	2,989	5,228	43	101	2	4	1,350	2,464	34	111	37	80	1,363	2,267	160	201
420-422	72,113	63,170	2,319	3,157	70	143	17,941	13,619	1,046	2,346	2,201	2,948	42,569	37,641	5,967	3,316
430-434	4,745	5,173	56	64	—	1	2,678	2,483	60	128	128	156	1,727	2,138	96	203
440-447	8,792	10,708	293	420	8	16	3,531	3,422	110	406	231	396	4,343	5,604	276	444
450-456	5,954	6,842	167	253	14	15	2,345	2,278	117	302	234	305	2,880	3,444	197	245
460-468	1,112	1,630	33	76	1	5	775	1,025	11	28	9	20	249	419	34	57
470-527	37,625	23,734	1,154	1,344	33	49	16,910	9,908	419	520	987	761	17,401	10,424	721	728
470-475	68	72	2	—	—	—	35	27	1	—	—	—	28	41	2	—
480-483	3,553	3,163	145	165	5	6	1,156	969	55	43	94	65	1,985	1,814	113	101
490-493	11,616	11,188	658	933	19	38	7,166	6,090	129	292	300	372	3,155	3,195	189	268
500-502	18,962	7,973	269	187	6	3	7,006	2,206	204	146	541	277	10,590	4,834	346	320
510-527	3,426	1,338	80	57	3	2	1,547	616	30	38	52	46	1,643	540	71	39
530-587	8,330	7,005	131	136	5	5	6,748	5,251	150	183	71	48	1,155	1,276	70	106
530-539	119	124	7	14	2	—	77	88	4	3	3	3	33	15	4	1
540-545	3,547	3,547	53	28	2	2	3,031	1,116	52	28	28	16	498	322	29	35
550-553	497	302	3	5	—	—	459	259	8	5	—	2	25	28	1	3
560-561	769	806	9	9	—	—	624	653	12	19	3	2	113	115	13	7
570-578	1,806	2,207	35	54	2	1	1,459	1,655	33	70	19	16	245	389	13	22
580-587	1,446	2,019	24	26	—	1	1,098	1,480	41	58	17	9	251	407	15	38
590-637	7,431	3,723	132	118	6	1	5,264	2,282	155	94	125	68	1,670	1,070	79	100
590-594	2,345	2,014	43	48	2	1	1,419	1,021	44	53	24	32	1,775	1,873	38	76
600-609	1,335	1,519	38	67	—	—	1,010	1,104	18	38	26	34	234	255	9	21
610-617	3,751	—	51	—	4	—	2,835	—	93	—	75	—	661	—	32	—
620-626	—	41	7	1	—	—	—	30	—	1	—	—	—	8	—	1
630-637	—	159	—	2	—	—	—	127	—	2	—	2	—	24	—	2
640-689	—	349	—	3	—	—	—	268	—	5	—	1	—	66	—	6
640-649	—	127	—	—	—	—	—	100	—	2	—	—	—	24	—	1
650-652	—	61	—	—	—	—	—	42	—	1	—	—	—	15	—	3
660	—	7	—	—	—	—	—	6	—	—	—	—	—	—	—	—
670-678	—	94	—	—	—	—	—	82	—	—	—	—	—	—	—	—
680-689	—	60	—	3	—	—	—	38	—	1	—	—	—	11	—	2
680-689	—	60	—	3	—	—	—	38	—	1	—	—	—	16	—	—

Table XCIX—continued

Cause of death	Intl. Classn. No.	Total deaths		Mental hospitals and mental deficiency hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
		M	F	N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.		M	F	M	F	M	F
				M	F	M	F	M	F	M	F						
Diseases of the skin and cellular tissue ..	690-716	194	247	11	9	—	—	129	166	5	8	4	4	44	56	1	4
Infection of skin and subcutaneous tissue ..	690-698	74	74	11	7	—	—	51	51	1	2	1	1	9	12	1	1
Other diseases of skin and subcutaneous tissue ..	700-716	120	173	—	2	—	—	78	115	4	6	3	3	35	44	—	3
Diseases of the bones and organs of movement ..	720-749	584	1,225	9	16	—	1	311	552	15	62	23	59	225	522	1	13
Arthritis and rheumatism, except rheumatic fever ..	720-727	309	941	4	8	—	1	143	383	6	49	21	48	133	444	—	8
Osteomyelitis and other diseases of bone and joint ..	730-738	157	187	2	7	—	—	108	112	6	8	—	9	41	48	—	3
Other diseases of musculoskeletal system ..	740-749	118	97	3	1	—	—	60	57	3	5	2	2	49	30	1	2
Congenital malformations ..	750-759	2,589	2,341	44	32	3	3	1,963	1,715	49	41	15	9	460	495	55	46
Certain diseases of early infancy ..	760-776	5,618	3,817	1	—	—	1	5,063	3,427	103	78	7	11	398	267	46	33
Birth injuries, asphyxia, and infections of the newborn ..	760-769	3,394	2,209	—	—	—	—	3,027	1,951	53	45	3	6	273	188	38	19
Other diseases peculiar to early infancy ..	770-776	2,224	1,608	1	—	—	1	2,036	1,476	50	33	4	5	125	79	8	14
Symptoms, senility, and ill-defined conditions ..	780-795	2,697	4,789	159	289	2	15	779	1,096	41	223	201	365	1,439	2,665	76	136
Symptoms referable to systems or organs ..	780-789	60	61	—	—	—	—	20	26	3	4	—	3	24	24	4	4
Senility and ill-defined diseases ..	790-795	2,637	4,728	159	289	2	15	750	1,070	38	219	201	362	1,415	2,641	72	132
Accidents, poisonings, and violence (external cause) ..	E800-E999	12,858	8,703	159	224	5	2	5,672	4,385	73	116	59	78	3,011	2,756	3,879	1,142
Railway accidents ..	E800-E802	288	21	—	—	—	—	114	2	—	1	—	—	—	—	3,879	1,142
Motor vehicle traffic accidents ..	E810-E825	3,608	1,219	7	4	—	—	184	847	19	5	—	—	35	16	174	18
Motor vehicle non-traffic accidents ..	E830-E835	65	6	—	—	—	—	38	2	4	—	1	—	1	—	1,093	347
Other road vehicle accidents ..	E840-E845	170	50	1	—	—	—	134	43	—	—	1	—	4	1	21	4
Water transport accidents ..	E850-E858	156	5	—	—	—	—	35	—	—	—	—	—	1	—	30	6
Aircraft accidents ..	E860-E866	145	12	—	—	—	—	4	—	4	—	1	—	2	2	120	5
Accidental poisoning by solid and liquid substances ..	E870-E888	176	177	3	4	—	—	68	71	3	2	1	—	82	92	19	8
Accidental poisoning by gases and vapours ..	E890-E895	369	464	1	—	—	—	38	58	—	1	1	—	274	370	56	33
Accidental falls ..	E900-E904	1,991	3,305	80	165	3	1	1,496	2,480	23	94	24	66	225	427	140	72
Other accidents ..	E910-E936	2,414	1,100	28	24	—	—	701	468	5	9	8	2	460	355	1,212	242
Complications due to non-therapeutic medical and surgical procedures ..	E940-E946	6	7	—	—	—	—	6	6	—	—	—	—	—	1	—	—
Therapeutic misadventures and late complications of therapeutic procedures ..	E950-E959	23	28	1	—	—	—	19	28	1	—	—	—	1	—	1	—
Late effects of injury and poisoning ..	E960-E965	159	37	3	4	—	—	89	20	7	—	5	2	53	10	2	1
Suicide and self-inflicted injury ..	E970-E979	3,170	2,145	33	22	2	1	440	347	7	4	15	7	1,830	1,389	843	375
Homicide and injury purposely inflicted by other persons (not in war) ..	E980-E985	116	127	3	—	—	—	36	13	—	—	2	—	43	93	32	21
Injury resulting from operations of war ..	E990-E999	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—

There were 95,645 deaths due to neoplasms, of which 42,795 (45 per cent) took place in the deceased person's own home, and 44,268 (46 per cent) in non-mental hospitals in the National Health Service. Respiratory tuberculosis caused 11 per thousand of the deaths in mental and mental deficiency hospitals belonging to the National Health Service, 11 per thousand of the deaths in non-mental hospitals, and seven per thousand of the deaths occurring at the person's own home. Arteriosclerotic and degenerative heart disease was the main cause of death in mental and mental deficiency hospitals, 38 per cent of the deaths being so assigned, compared with 15 per cent of the deaths in non-mental hospitals of the National Health Service.

### **Mortality analysis by method of certification**

Table C (page 190) shows the number of deaths in 1957 for 47 groups of causes, according to the basis of diagnosis, whether by certifying medical practitioner, coroner's certificate, or uncertified. Of the total of 514,870 deaths, 75,161 were registered on the basis of a coroner's certificate after inquest or on the results of a post-mortem examination ordered by a coroner without an inquest. In 65,003 (86 per cent) of these deaths, a post-mortem examination was held.

Of the 437,575 deaths registered on a certificate from a medical practitioner, post-mortem examinations were held in 45,651 cases (10 per cent). In another 10,037, an operation or other examination was mentioned on the death certificate. There were 2,134 uncertified deaths, of which 1,379 (65 per cent) were assigned to arteriosclerotic and degenerative heart disease.

The proportion of all deaths certified after post-mortem was 21 per cent. Of deaths assigned to malignant neoplasms there had been a post-mortem in 14 per cent. For young children whose deaths were assigned to birth injuries, post-natal asphyxia and atelectasis (I.S.C. Nos. 760-762) the proportion certified after post-mortem was 56 per cent, and for those assigned to infections of the newborn (I.S.C. Nos. 763-768) 68 per cent.



Table C. Deaths by cause and sex, according to method of certification, 1957, England and Wales

Cause of death	Intl. Classn. No.	Total deaths		Coroner				Certifying medical practitioner								Uncertified			
		M	F	Inquest held		Post-mortem without inquest		After post-mortem				Operation mentioned on death certificate		Other examination mentioned on death certificate				No examination mentioned	
				With post-mortem	No post-mortem	M	F	M	F	M	F	M	F	M	F	M	F		
All causes	..	266,407	248,463	9,945	5,284	5,965	4,193	30,283	19,491	25,850	19,801	5,047	4,602	210	178	187,856	194,031	1,251	883
Tuberculosis of respiratory system	001-008	3,150	1,099	136	1	39	5	412	103	385	124	43	26	1	—	2,129	837	5	3
Tuberculosis, other forms	010-019	264	271	7	5	4	1	34	31	90	111	11	9	—	—	117	113	1	1
Syphilis and its sequelae	020-029	879	413	11	3	4	—	302	167	157	63	9	3	5	—	389	175	2	2
Typhoid fever	040	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery, all forms	045-048	11	11	—	1	—	—	3	—	2	5	—	—	—	1	6	4	—	—
Scarlet fever and streptococcal sore throat	050-051	11	15	2	—	1	—	—	4	2	2	—	—	—	—	6	9	—	—
Diphtheria	055	2	4	—	—	—	—	—	—	1	1	—	—	—	—	1	3	—	—
Whooping cough	056	33	55	—	—	—	—	3	7	6	11	—	—	—	—	24	37	—	—
Meningococcal infections	057	94	90	1	—	—	—	26	37	36	27	—	—	—	1	30	25	1	—
Acute poliomyelitis	080	143	83	2	4	—	—	12	6	42	26	2	1	1	—	84	45	—	1
Smallpox	084	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	085	54	41	1	1	1	—	12	6	9	7	—	—	—	—	31	27	—	—
Malaria	110-117	3	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
All other diseases classified as infective and parasitic	Rem. 001-138	498	496	35	16	12	4	79	67	133	130	3	1	—	1	231	277	5	—
Malignant neoplasms	140-205	50,056	43,961	286	76	95	46	1,802	1,196	5,994	4,201	2,833	3,402	145	133	38,878	34,886	23	21
Benign and unspecified neoplasms	210-239	736	892	15	16	1	9	74	121	124	204	40	99	7	4	475	438	—	1
Diabetes mellitus	260	1,013	2,124	4	8	2	4	54	92	151	271	19	22	—	—	780	1,722	3	5
Anaemias	290-293	559	1,167	—	2	—	—	25	59	92	161	—	1	2	5	440	938	—	1
Vascular lesions affecting central nervous system	330-334	30,537	43,132	130	48	36	29	1,776	2,568	1,602	1,746	10	7	1	1	26,890	38,624	92	109
Non-meningococcal meningitis	340	262	158	5	1	—	—	60	24	98	55	—	—	4	1	95	78	—	—
Rheumatic fever	400-402	78	96	2	2	—	—	22	21	24	29	1	—	—	1	29	43	—	—
Chronic rheumatic heart disease	410-416	2,989	5,228	42	14	12	5	454	521	384	652	17	44	—	—	2,074	3,981	6	11
Arteriosclerotic and degenerative heart disease	420-422	72,113	63,170	556	100	177	39	15,398	6,986	3,348	2,279	21	11	15	3	51,744	53,227	854	525
Other diseases of heart	430-434	4,745	5,173	13	6	5	3	186	136	415	310	1	—	4	1	4,100	4,699	21	18
Hypertension with heart disease	440-443	5,368	6,914	29	9	1	3	437	378	378	333	—	4	—	—	4,512	6,179	11	11
Hypertension without mention of heart	444-447	3,424	3,794	29	2	7	3	596	574	307	250	2	1	1	—	2,476	2,947	6	14

<b>Influenza</b> ..	480-483	3,553	3,163	23	6	8	2	379	297	262	238	1	—	—	—	2	2,859	2,608	21	10
Pneumonia ..	490-493	11,616	11,188	111	52	15	20	1,769	1,265	1,671	1,204	3	2	3	—	3	8,028	8,628	16	14
Bronchitis ..	500-502	18,962	7,973	221	23	74	3	1,499	689	1,226	416	3	2	2	—	—	15,901	6,827	36	13
Ulcer of stomach and duodenum	540, 541	3,568	1,461	54	9	28	3	558	257	1,175	426	456	132	8	1	1	1,285	632	4	1
Appendicitis ..	550-553	497	302	12	10	7	2	76	45	165	83	75	50	—	—	—	162	112	—	—
Intestinal obstruction and hernia	560, 561, 570	1,442	1,464	36	15	16	17	323	304	378	376	224	201	1	3	3	463	546	1	2
Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	915	1,302	17	20	6	7	131	163	286	369	63	75	—	3	3	411	663	1	2
Cirrhosis of liver	581	667	539	31	16	11	—	78	57	186	150	4	9	1	—	—	356	305	—	2
Nephritis and nephrosis ..	590-594	2,345	2,014	15	4	4	—	113	113	420	324	3	—	1	—	—	1,789	1,573	—	—
Hyperplasia of prostate ..	610	3,645	—	38	—	9	—	229	—	559	—	773	—	1	—	—	2,035	—	1	—
Complications of pregnancy, childbirth, and the puerperium ..	{ 640-652, 660, 670-689 }	—	349	—	65	—	17	—	103	—	86	—	9	—	—	—	—	69	—	—
Congenital malformations	750-759	2,589	2,341	25	13	7	3	394	295	850	687	54	36	1	2	2	1,250	1,301	8	4
Birth injuries, post-natal asphyxia and atelectasis ..	760-762	2,852	1,829	13	9	4	4	178	121	1,392	900	—	—	—	—	—	1,257	789	8	6
Infections of the newborn	763-768	482	326	6	1	2	—	84	56	234	165	—	—	—	—	—	156	103	—	1
Other diseases peculiar to early infancy	769-776	2,284	1,662	3	3	1	—	43	28	482	349	—	—	—	—	—	1,735	1,273	20	9
Senility, ill-defined and unknown causes	780-795	2,697	4,789	38	25	8	9	24	66	21	32	—	—	—	—	—	2,590	4,628	16	29
All other diseases	Rem. 140-795	18,411	20,662	641	219	178	88	2,518	2,409	2,744	2,967	360	439	4	12	12	11,913	14,477	53	29
Motor vehicle accidents	E810-E835	3,673	1,225	2,176	731	1,484	489	1	2	—	—	1	—	1	—	—	3	2	7	1
All other accidents ..	{ E800-E802, E840-E962 }	5,797	5,203	3,174	2,297	2,355	2,561	110	113	17	27	15	16	1	1	1	97	174	28	14
Suicide and self-inflicted injury	E963, { E970-E979 }	3,170	2,146	1,867	1,351	1,300	788	2	3	—	1	—	—	—	—	—	—	2	1	1
Homicide and operations of war	{ E964, E965, E980-E999 }	218	129	138	100	51	29	7	—	1	—	—	—	—	—	—	21	—	—	—

Table CI. Deaths under, or connected with the administration of, various anaesthetics, by sex and age, 1957, England and Wales

Anaesthetic agent, or combination of agents, as stated on the coroner's certificate		All ages	0-	5-	15-	25-	35-	45-	55-	65 and over
Amethocaine .. .. .	.. .. .	M .. F	2	1	1	1	1	1	1	1
Chloroform .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Chloroform and ether .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Chloroform, ether, nitrous oxide, and cyclopropane .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Chloroform, nitrous oxide, and tubarine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Cocaine .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Cocaine and procaine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Curare .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Curare, flaxedil, and pentothal .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Curare and pentothal .. .. .	.. .. .	.. F	2	1	1	1	1	1	1	1
Curare, pentothal, and pethidine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Curare and pethidine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Curare, pethidine, and thiopentone .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Curare and thiopentone .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Cyclopropane .. .. .	.. .. .	.. M	2	2	2	2	2	2	2	2
Cyclopropane and flaxedil .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Cyclopropane, flaxedil, and pentothal .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Cyclopropane, flaxedil, and thiopentone .. .. .	.. .. .	.. M	3	1	1	1	1	1	1	1
Cyclopropane and pentothal .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Cyclopropane and pethidine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Cyclopropane and thiopentone .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Cyclopropane and tubocurarine .. .. .	.. .. .	.. M	3	3	3	3	3	3	3	3
Ether .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Ether and ethylchloride .. .. .	.. .. .	.. F	5	1	1	1	1	1	1	1
Ether, ethylchloride, and flaxedil .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Ether, ethylchloride, and nitrous oxide .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Ether, flaxedil, and fluothane .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Ether and nitrous oxide .. .. .	.. .. .	.. M	2	4	1	1	1	1	1	1
Ether, nitrous oxide, curare, and pentothal .. .. .	.. .. .	.. F	6	2	1	1	1	1	1	1
Ether, nitrous oxide, cyclopropane, omniopon, pentothal, pethidine, and scopalamine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Ether, nitrous oxide, and evipan .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Ether, nitrous oxide, evipan, flaxedil, omniopon, scopalamine, and trileine .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Ether, nitrous oxide, and flaxedil .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Ether, nitrous oxide, flaxedil, and pentothal .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1
Ether, nitrous oxide, flaxedil, pentothal, and trileine .. .. .	.. .. .	.. M	1	1	1	1	1	1	1	1
Ether, nitrous oxide, flaxedil, and pethidine .. .. .	.. .. .	.. M	2	1	1	1	1	1	1	1
Ether, nitrous oxide, flaxedil, and trileine .. .. .	.. .. .	.. F	1	1	1	1	1	1	1	1





Table CI—continued

Anaesthetic agent, or combination of agents, as stated on the coroner's certificate	All ages	0—	5—	15—	25—	35—	45—	55—	65 and over
Nitrous oxide and cyclopropane .. .. .	1	—	—	—	—	—	—	—	1
Nitrous oxide, cyclopropane, flaxedil, and nuvotox .. .. .	2	—	—	—	—	1	1	—	—
Nitrous oxide, cyclopropane, flaxedil, and pentothal .. .. .	1	—	—	—	—	—	—	1	—
Nitrous oxide, cyclopropane, and pentothal .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, cyclopropane, pethidine, procaine, and sodium pentothal .. .. .	1	1	—	—	—	—	—	—	—
Nitrous oxide, cyclopropane, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, cyclopropane, thiopentone, and tubarine .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide and flaxedil .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, flaxedil, fluothane, and thiopentone .. .. .	1	—	—	—	1	—	—	—	—
Nitrous oxide, flaxedil, hexobarbitone, pethidine, and trichloroethylene .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, flaxedil, omnopon, pentothal, and scopolamine .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, flaxedil, omnopon, scopolamine, and thiopentone .. .. .	1	—	—	—	1	—	—	—	—
Nitrous oxide, flaxedil, and pentothal .. .. .	9	—	—	—	2	2	—	—	7
Nitrous oxide, flaxedil, pentothal, and pethidine .. .. .	8	—	—	—	—	—	—	—	2
Nitrous oxide, flaxedil, pentothal, pethidine, and trilene .. .. .	4	—	—	—	—	—	—	—	3
Nitrous oxide, flaxedil, pentothal, pethidine, and trilene .. .. .	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil, pethidine, and trilene .. .. .	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil, pethidine, scopolamine, thiopentone, and trilene .. .. .	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil, pethidine, and thiopentone .. .. .	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil, pethidine, and trilene .. .. .	7	—	—	—	—	1	4	—	1
Nitrous oxide, flaxedil, pethidine, and trilene .. .. .	5	—	—	—	—	—	—	—	—
Nitrous oxide, flaxedil, and sodium thiopentone .. .. .	1	—	—	—	—	2	—	—	—
Nitrous oxide, flaxedil, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, flaxedil, thiopentone, and trilene .. .. .	5	—	—	—	—	—	—	—	—
Nitrous oxide and fluothane .. .. .	2	—	—	—	—	1	1	—	—
Nitrous oxide, fluothane, and pentothal .. .. .	2	—	—	—	—	—	—	—	—
Nitrous oxide, fluothane, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, gallamine, hexobarbitone, pentothal, and pethidine .. .. .	1	—	—	1	—	—	—	—	—
Nitrous oxide, gallamine, and pentothal .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, gallamine, pethidine, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, gallamine, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, hexobarbitone, pethidine, and tubarine .. .. .	3	—	—	—	—	—	—	—	—
Nitrous oxide and kemithal .. .. .	2	—	—	1	—	—	—	—	—
Nitrous oxide and nupecaine .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, nupecaine, and sodium pentothal .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, nupecaine, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, omnopon, pentothal, pethidine, scopolamine, and tubarine .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, omnopon, pethidine, scopolamine, and thiopentone .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, omnopon, pethidine, scopolamine, thiopentone, and tubarine .. .. .	1	—	—	—	—	—	—	—	—
Nitrous oxide, omnopon, scopolamine, thiopentone, and tubocurarine .. .. .	1	—	—	—	—	—	—	—	—





Table CI—continued

Anaesthetic agent, or combination of agents, as stated on the coroner's certificate		All ages	0-	5-	15-	25-	35-	45-	55-	65 and over
Pethidine, thiopentone, and xylocaine										
Procaine .. .. .	.. .. .	1	—	—	—	1	—	—	—	—
Sodium thiopentone .. .. .	.. .. .	3	—	—	1	—	—	—	—	3
Sodium thiopentone and tubarine	.. .. .	1	—	—	—	—	—	—	1	—
Thiopentone .. .. .	.. .. .	9	—	—	1	1	—	—	2	4
Thiopentone and tubarine	.. .. .	6	—	—	—	—	—	1	—	3
Tubarine .. .. .	.. .. .	1	—	—	—	—	—	—	—	—
Tubocurarine .. .. .	.. .. .	1	—	—	—	—	—	—	—	—
Xylocaine .. .. .	.. .. .	7	—	1	—	—	—	—	—	1
Anaesthetic (not stated)	.. .. .	4	1	—	—	—	—	1	2	6
		8	2	—	—	—	—	—	—	2
		9	—	—	1	—	—	—	1	3
			—	—	—	—	—	—	—	7
Total .. .. .		241	18	6	4	9	13	35	50	106
		209	10	7	12	13	26	23	40	78

# **Live births, stillbirths and stillbirth rates by age and parity of mother and place of confinement**

In England and Wales in 1957 there were 739,996 live and still births, 23,256 more than in the previous year. Table CII below gives details of the distribution of these births by place of confinement.

**Table CII. Births by place of confinement, 1957, England and Wales**

Place of confinement	Live births	Still-births	Total births	Total births per cent by place of confinement*	Stillbirth rate per 1,000 total births*
N.H.S. hospital .. ..	435,253	12,923	448,176	60·6 (60·4)	28·8 (29·2)
Non-N.H.S. hospital ..	27,279	341	27,620	3·7 (3·9)	12·3 (13·2)
At home .. .. .	243,765	3,091	246,856	33·4 (33·3)	12·5 (13·1)
Other .. .. .	17,084	260	17,344	2·3 (2·4)	15·0 (15·6)
<b>Total .. ..</b>	<b>723,381</b>	<b>16,615</b>	<b>739,996</b>	<b>100·0</b>	<b>22·5 (22·9)</b>

\* The figures in brackets are the corresponding figures for 1956.

The distribution of births by place of confinement was almost the same as in 1956, just over 60 per cent of births in National Health Service hospitals, and 33 per cent at home.

The fall in the overall stillbirth rate in 1957 compared with 1956 occurred in all places of confinement. The stillbirth rate was highest in National Health Service hospitals, for it is in those hospitals that many of the more difficult confinements take place.

Table CIII (page 199) gives the number of live births, Table CIV the number of stillbirths (page 199) and Table CV (page 200) the percentage distribution of births for each place of confinement of mother. These data are given for a summarised age and parity distribution of mother, parity in this instance meaning the number of previous liveborn children. In these tables all illegitimate births have been included as first-born children because, although no information about parity of the mother is obtained at the registration of an illegitimate birth, it can be assumed that the majority are first-born.

Just under 80 per cent of first children were born in National Health Service hospitals. Whatever the age of the mother, second and later children were, by comparison, born more frequently at home.

Table CVI (page 200) gives details of the stillbirth rates per 1,000 total births by age and parity of mother according to place of confinement. It emphasizes the high risk of stillbirth to mothers over the age of 35, the rate being particularly high for first-born children, falling for the second to fourth births and rising again for fifth and subsequent births.

The very high stillbirth rate for children born to mothers of unstated age suggests that this group is of abnormal constitution.

Table CVII (page 201) shows stillbirth rates per 1,000 total births by parity of mother and place of confinement in the standard regions of England and Wales. The table below compares the ratio of the stillbirth rate in National Health Service hospitals to that at home, with the total stillbirth rate in the region.

The general tendency is for the highest stillbirth rates to occur in those regions with the lowest ratios of stillbirth rates in hospital to stillbirth rates at home. There is no relationship between the ratio of the rates and that of the number of live births in hospital to the number of births at home.

Standard region	Ratio of stillbirth rate in hospital to rate at home	Regional stillbirth rate per 1,000 total births	Ratio of number of births in hospital to number of births at home
Northern .. .. .	2·13	26	1·44
North Western .. .. .	2·29	26	1·97
Wales I .. .. .	1·83	26	1·73
Wales II .. .. .	1·62	24	3·76
East and West Ridings .. .. .	2·67	23	1·58
Midland .. .. .	2·38	23	1·49
North Midland .. .. .	2·50	22	1·37
South Western .. .. .	2·54	21	1·77
Eastern .. .. .	2·64	20	1·24
London and South Eastern .. .. .	2·30	20	2·85
Southern .. .. .	2·60	19	1·69

*A set of tables is available for reference at the General Register Office showing numbers of live and still births with a breakdown as in Tables CIII and CIV for individual county boroughs and administrative counties within England and Wales. A copy of these tables, or of a table for a particular area, can also be obtained from the General Register Office on payment.*



**Table CIII. Live births by age and parity\* of mother and place of confinement, 1957, England and Wales**

Note. Institutions described as Non-N.H.S. hospitals are mainly maternity homes.

Age-group	Parity of mother														
	0			1-3			4 and over			Total					
	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other			
All ages	239,178	12,174	45,762	8,619	173,141	14,306	166,322	8,076	22,934	799	31,681	389	27,279	243,765	17,084
Under 25	130,494	6,138	25,621	6,178	38,891	2,653	37,770	3,335	417	17	807	23	8,808	64,198	9,536
25-34	94,889	5,415	17,518	2,272	104,106	9,104	106,370	4,323	10,998	411	17,896	232	14,930	141,784	6,827
35 and over	13,329	600	2,457	146	29,888	2,531	21,799	400	11,456	371	12,891	133	3,502	37,147	679
Not stated	466	21	166	23	256	18	383	18	63	—	87	1	39	636	42

**Table CV. Percentage distribution of births for each place of confinement within each age and parity\* group, 1957, England and Wales**

Note. Institutions described as Non-N.H.S. hospitals are mainly maternity homes.

Age-group	Parity of mother															
	0				1-3				4 and over				Total			
	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other
All ages ..	78	4	15	3	48	4	46	2	42	1	56	1	61	4	33	2
Under 25 ..	77	4	15	4	48	3	45	4	34	1	63	2	68	3	25	4
25- ..	79	4	15	2	47	4	47	2	38	1	60	3	56	4	38	2
35 and over ..	80	4	15	1	55	5	39	1	47	1	51	1	57	4	38	1
Not stated ..	66	3	24	7	39	3	55	3	42	—	57	7	52	3	40	5

\* Parity in this instance means the number of previous liveborn children.

**Table CVI. Stillbirth rates per 1,000 total births, by age and parity\* of mother and place of confinement, 1957, England and Wales**

Note. Institutions described as Non-N.H.S. hospitals are mainly maternity homes.

Age-group	Parity of mother												Total			
	0			1-3			4 and over									
	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	N.H.S. hospital	Non-N.H.S. hospital	At home	Other				
All ages ..	27	15	19	20	28	9	10	9	54	20	16	28	29	12	13	15
Under 25 ..	23	14	17	16	20	9	7	6	28	—	6	42	22	12	11	13
25- ..	29	14	18	13	27	8	10	11	44	14	13	13	29	11	12	12
35 and over ..	47	37	35	52	44	13	17	20	64	26	20	50	49	19	19	33
Not stated ..	119	160	157	596	52	53	18	—	60	—	33	—	94	114	61	447

\* Parity in this instance means the number of previous liveborn children.

\* Parity in this instance means the number of previous liveborn children.

Table CVIII. Stillbirth rates per 1,000 total births, by parity\* of mother and place of confinement, 1957, England and Wales, Standard Regions and Wales

Note. Institutions described as Non-N.H.S. hospitals are mainly maternity homes.

Area	Parity of mother															
	0				1-3				4 and over				Total			
	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	Total	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	Total	N.H.S. hospital	Non-N.H.S. hospital	At home	Other	Total	Total
England and Wales .. .. .	27	15	19	20	25	28	9	10	9	19	54	20	16	28	32	22
Standard Regions :																
Northern .. .. .	32	14	22	19	29	33	9	13	8	21	62	15	18	—	34	26
East and West Ridings .. .	29	12	19	14	26	32	12	9	9	19	57	—	19	42	36	23
North Western .. .. .	30	14	27	30	29	32	10	11	10	22	58	55	15	—	34	26
North Midland .. .. .	27	17	19	19	25	32	5	9	12	18	52	—	19	19	31	22
Midland .. .. .	28	9	18	20	25	32	2	10	12	19	57	—	16	51	32	23
Eastern .. .. .	28	19	14	11	24	26	13	10	4	16	58	30	17	38	33	20
London and South Eastern ..	22	17	16	32	22	23	11	9	9	17	46	14	10	26	28	20
Southern .. .. .	25	16	13	17	22	26	8	8	6	16	37	23	14	56	24	19
South Western .. .. .	27	11	18	12	25	26	6	9	14	17	55	—	13	—	32	21
Wales (including Monmouthshire)	30	14	26	22	29	28	11	16	7	22	58	—	17	38	35	26
Wales I (South East) .. .	31	15	25	18	29	30	12	16	6	23	64	—	21	91	39	26
Wales II (remainder) .. .	28	—	32	30	28	22	—	17	9	20	46	—	2	—	26	24

\* Parity in this instance means the number of previous liveborn children.



# GREAT BRITAIN AND IRELAND

## Vital Statistics

Table A1 of Part II shows the populations of Great Britain and Ireland and of the constituent countries for each census since 1801, and also the mid-year population estimates for each year since 1921.

For the current year, *home* population estimates together with marriage, live birth, death and infant mortality rates are shown in Table W of Part II. These are repeated with similar rates for earlier years in Table CVIII.

**Table CVIII. Vital statistics : 1938, 1946-1950 and 1953 to 1957, Great Britain and Ireland**

	Great Britain and Ireland	England	Wales (including Monmouthshire)	Scotland	Northern Ireland	Irish Republic <sup>(1)</sup>
Estimated mid-year home population (in thousands)						
1957 { Males	26,250	20,367	1,281	2,465	681	1,456
Females	28,090	21,929	1,330	2,685	717	1,429
Persons	54,340	42,296	2,611	5,150	1,398	2,885
Marriages <sup>(2)</sup>						
1957 .. .. .	413,393	327,174	19,729	42,676	9,391	14,423
Persons marrying per 1,000 living						
1938 .. .. .	16.8	17.6	16.2	15.5	13.4	10.1
1946-1950 .. .. .	17.1	17.7	17.4	16.9	13.9	11.0
1953 .. .. .	15.3	15.7	15.4	16.0	13.6	10.8
1954 .. .. .	15.2	15.5	15.1	16.4	13.2	10.8
1955 .. .. .	15.8	16.1	16.3	16.8	13.6	11.3
1956 .. .. .	15.6	15.8	15.6	17.1	13.4	11.6
1957 .. .. .	15.2	15.5	15.1	16.6	13.4	10.0
Live births <sup>(2)</sup> ( <sup>3</sup> )						
1957 .. .. .	912,752	681,736	41,645	97,977	30,108	61,286
Per 1,000 living						
1938 .. .. .	15.7	15.1	15.3	17.7	20.0	19.4
1946-1950 .. .. .	18.5	18.0	17.9	19.8	22.0	22.2
1953 .. .. .	16.2	15.5	16.0	17.8	20.9	21.2
1954 .. .. .	15.9	15.2	15.5	18.0	20.8	21.3
1955 .. .. .	15.8	15.0	14.9	18.0	20.8	21.2
1956 .. .. .	16.4	15.7	15.7	18.5	21.1	21.0
1957 .. .. .	16.8	16.1	15.9	19.0	21.5	21.2

(1) The Irish Republic rates are based on *home* population throughout.

(2) The marriage and live birth rates for 1938 and 1953 onwards are based on *home* populations. For the 1946-50 aggregate they are based on *total* populations.

(3) England and Wales: occurrences. Remainder: registrations.

Table CVIII—*continued*

	Great Britain and Ireland	England	Wales (including Monmouthshire)	Scotland	Northern Ireland	Irish Republic <sup>(1)</sup>
Deaths <sup>(2)</sup>						
1957 .. ..	625,508	482,174	32,696	61,143	15,187	34,308
Per 1,000 living						
1931-1938 <sup>(3)</sup> ..	12.4	12.0	12.9	13.3	14.4	14.2
1946-1950 .. ..	11.9	11.7	12.6	12.5	11.9	13.3
1953 .. ..	11.4	11.4	12.1	11.5	10.7	11.7
1954 .. ..	11.4	11.3	12.6	12.0	10.9	12.1
1955 .. ..	11.7	11.6	13.0	12.0	11.1	12.6
1956 .. ..	11.7	11.6	12.4	12.0	10.6	11.7
1957 .. ..	11.5	11.4	12.5	11.9	10.9	11.9

Infant mortality (deaths of infants under one year of age<sup>(4)</sup>)

1957 .. ..	22,417	15,537	1,183	2,802	869	2,026
Per 1,000 live births						
1938 .. ..	55	53	57	70	75	67
1946-1950 .. ..	39	36	42	47	48	57
1953 .. ..	28	27	31	31	38	39
1954 .. ..	27	25	32	31	33	38
1955 .. ..	27	25	31	30	32	37
1956 .. ..	25	23	29	29	29	36
1957 .. ..	25	23	28	29	29	33

<sup>(1)</sup> The Irish Republic rates are based on *home* population throughout.

<sup>(2)</sup> The death rates are based on total deaths and *home* populations except for the years 1946-49 in the 1946-50 aggregate where they are based on civilian deaths and *civilian* populations.

<sup>(3)</sup> The aggregate 1931-38 is given since crude death rates in 1938 were rather lower than in adjacent years.

<sup>(4)</sup> England and Wales: for 1957, based on deaths per 1,000 occurrences; for earlier years, based on deaths per 1,000 related live births. Remainder: based on deaths per 1,000 births registered.

**Population.**—The home population of Great Britain and Ireland at mid-1957 was estimated to be 54,340,000, which represented an increase of 2.2 per cent on the 1951 Census figures. The increase amounted to 2.8 per cent in England; 0.46 per cent in Wales; 1.1 per cent in Scotland and 2.0 per cent in Northern Ireland. In the Irish Republic the population had fallen below the 1951 Census figure by 2.6 per cent.

**Marriage rates.**—During 1957 the marriage rate in Great Britain and Ireland again decreased to 15.2 per thousand compared with 15.6 in 1956 and 15.8 in 1955. Northern Ireland was the only country where the marriage rate did not fall. The marriage rate in Scotland remained significantly higher than the rate for Great Britain and Ireland combined, and that for the Irish Republic significantly lower.

**Birth rates.**—The live birth rate in Great Britain and Ireland again increased, being 16.8 per thousand compared with 16.4 in 1956 and 15.8 in 1955. There was an increase in all countries, though the rates in England and Wales remained significantly lower than those in Scotland and Ireland.

**Death rates.**—The death rate in Great Britain and Ireland was 11·5 per thousand population in 1957 compared with the 1956 figure of 11·7. In the individual countries the rates were only slightly different from those of the preceding year. There was little variation between the overall death rates for the individual countries but this similarity conceals some considerable variations when deaths are analysed by cause.

**Infant mortality rates.**—At 25 per thousand live births the infant mortality rate in Great Britain and Ireland remained at the low level reached in 1956. The rates for the individual countries showed little change, apart from the rate in the Irish Republic which continued to fall, though it was still significantly higher than in the other countries.

**Cause of death.**—The number of deaths and the death rates classified by sex and selected cause are shown in Table CIX for Great Britain and Ireland and the constituent countries.

The large differences in the recorded rates for senility and unknown causes between Ireland and Great Britain may reflect differences in diagnostic practice. Such differences will affect comparison for other specific causes, and it is possible that they are partly the cause of the lower death rates recorded in Ireland, and particularly in the Irish Republic, from cancer of the trachea, bronchus and lung and from vascular lesions affecting the central nervous system. A similar feature may affect the comparison of the rates for arteriosclerotic heart diseases and degenerative heart disease between the Irish Republic and the rest of Great Britain and Ireland.

There was some variation in the death rates from tuberculosis of the respiratory system, the death rate being considerably higher for both sexes in the Irish Republic than in the remainder of Great Britain and Ireland where Wales and Scotland had rather higher rates than England and Northern Ireland.

In all the countries there was a noticeable increase in the death rate due to influenza caused by the epidemic in the autumn of 1957. As in 1956, death rates from pneumonia were higher in England than in the other countries, and both England and Wales had comparatively high death rates from bronchitis.

Mortality from motor accidents showed little variation between countries apart from the Irish Republic which in 1957 had lower death rates than the other countries, particularly for males. Death rates from suicide and self-inflicted injury continue to be much lower in Ireland than in Great Britain.



**Table CIX. Deaths and death rates by cause and sex, 1957, Great Britain and Ireland**  
Classified in accordance with the Abbreviated (B) List of the International Statistical Classification (Sixth Revision)

Cause of death (and International Classification Numbers)	Sex	Deaths					Death rates per million living						
		Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*
All Causes .. .. .	M. F.	324,313 301,198	248,640 233,534	17,767 14,929	31,622 29,521	7,929 7,258	18,355 15,956	12,271 10,723	12,208 10,650	13,870 11,225	12,827 10,995	11,638 10,120	12,606 11,166
Tuberculosis of respiratory system (001-008) .. .. .	M. F.	4,092 1,554	2,908 1,006	242 93	452 212	107 43	383 200	155 55	143 46	189 70	183 79	157 60	263 140
Tuberculosis, other forms (010- 019) .. .. .	M. F.	378 354	249 253	15 18	32 27	17 8	65 48	14 13	12 12	12 14	13 10	25 11	45 34
Syphilis and its sequelae (020-029) { .. .. .	M. F.	991 453	830 394	49 19	72 22	25 13	15 5	37 16	41 18	38 14	29 8	37 18	10 3
Typhoid fever (040) .. .. .	M. F.	2 7	1 7	—	—	1	—	0 0	0 0	—	—	1	—
Cholera (043) .. .. .	M. F.	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery, all forms (045-048) .. { .. .. .	M. F.	16 17	11 11	—	3 3	—	2 1	1 1	1 1	—	1 2	—	1 1
Scarlet fever and streptococcal sore throat (050,051) .. .. .	M. F.	12 17	9 15	2 —	1 1	—	—	0 1	0 1	2 —	0 0	—	—
Diphtheria (055) .. .. .	M. F.	5 7	2 4	—	—	—	3 3	0 0	0 0	—	—	—	2 2
Whooping cough (056) .. .. .	M. F.	53 78	31 50	2 5	10 11	1 1	9 11	2 3	2 2	2 4	4 4	1 1	6 8
Meningococcal infections (057) .. { .. .. .	M. F.	121 104	87 80	7 10	14 7	3 1	10 6	5 4	4 4	5 8	6 3	4 1	7 4
Plague (058) .. .. .	M. F.	—	—	—	—	—	—	—	—	—	—	—	—
Acute poliomyelitis (080) .. .. .	M. F.	162 97	137 79	6 4	7 4	5 4	7 6	6 3	7 4	5 3	3 1	7 6	5 4
Smallpox (084) .. .. .	M. F.	1 1	1 1	—	—	—	—	0 0	0 0	—	—	—	—
Measles (085) .. .. .	M. F.	70 63	53 36	1 5	6 10	1 2	9 10	3 2	3 2	1 4	2 4	1 3	6 7

\*Provisional.

Table CIX—continued

Cause of death (and International Classification Numbers)	Sex	Deaths						Death rates per million living					
		Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*
Typhus and other rickettsial diseases (100-108) .. .. .	M. F.	—	—	—	—	—	—	—	—	—	—	—	—
Malaria (110-117) .. .. .	M. F.	5 1	3 1	—	—	—	2	0 0	0 0	—	—	—	1
All other diseases classified as infective and parasitic (remainder of 001-138) .. .. .	M. F.	618 596	458 471	40 25	53 53	25 19	42 28	23 21	22 21	31 19	21 20	37 26	29 20
Malignant neoplasms (140-205) .. .. .	M. F.	59,529 52,437	47,104 41,473	2,952 2,488	5,632 5,115	1,264 1,119	2,577 2,242	2,252 1,867	2,313 1,891	2,304 1,871	2,285 1,905	1,855 1,560	1,770 1,569
Malignant neoplasm of stomach (151) .. .. .	M. F.	9,690 7,456	7,298 5,546	688 463	874 820	231 200	599 427	367 265	358 253	357 348	355 305	339 279	411 299
Malignant neoplasm of trachea, bronchus and lung (162,163) .. .. .	M. F.	18,865 3,171	15,639 2,612	791 77	1,777 304	268 45	390 133	714 113	768 119	617 58	721 113	393 63	268 93
Malignant neoplasm of breast (170) .. .. .	M. F.	74 10,118	69 8,172	1 441	4 940	— 192	— 373	3 360	3 373	1 332	2 350	— 268	— 261
Malignant neoplasm of uterus (171-174) .. .. .	F.	4,631	3,676	263	422	99	171	165	168	198	157	138	120
Leukaemia and aleukaemia (204) .. .. .	M. F.	1,543 1,271	1,221 1,041	80 52	142 109	33 30	67 39	58 45	60 47	62 39	58 41	48 42	46 27
Other malignant and lymphatic neoplasms (remainder of 140-205) .. .. .	M. F.	29,357 25,790	22,877 20,422	1,392 1,192	2,835 2,520	732 553	1,521 1,099	1,111 918	1,123 931	1,087 896	1,150 939	1,074 771	1,045 769
Benign and unspecified neoplasms (210-239) .. .. .	M. F.	871 1,035	690 843	46 49	59 74	8 10	68 59	33 37	34 38	36 37	24 28	12 14	47 41
Diabetes mellitus (260) .. .. .	M. F.	1,275 2,669	947 2,000	66 124	145 360	30 59	87 126	48 95	46 91	52 93	59 134	44 82	60 88
Anaemias (290-293) .. .. .	M. F.	730 1,489	512 1,066	47 101	72 142	18 28	81 152	28 53	25 49	37 76	29 53	26 39	56 106
Vascular lesions affecting central nervous system (330-334) .. .. .	M. F.	37,151 51,989	28,447 40,190	2,090 2,942	4,030 5,536	872 1,192	1,712 2,129	1,406 1,851	1,397 1,833	1,632 2,212	1,635 2,062	1,280 1,662	1,176 1,490
Nonmeningococcal meningitis (340) .. .. .	M. F.	322 208	244 151	18 7	33 26	5 4	22 20	12 7	12 7	14 5	13 10	7 6	15 14

\*Provisional.

Table CIX—continued

Cause of death (and International Classification Numbers)	Sex	Deaths					Death rates per million living						
		Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*
Rheumatic fever (400-402) .. {	M. F.	140 149	70 86	8 10	26 19	9 11	27 23	5 5	3 4	6 8	11 7	13 15	19 16
Chronic rheumatic heart disease (410-416) .. .. {	M. F.	3,566 6,203	2,760 4,939	229 289	303 604	73 140	201 231	135 221	136 225	179 217	123 225	107 195	138 162
Arteriosclerotic heart diseases in- cluding coronary disease (420) .. {	M. F.	57,515 34,174	44,634 26,796	3,175 1,719	5,942 3,571	1,556 898	2,208 1,190	2,176 1,217	2,191 1,222	2,479 1,292	2,410 1,330	2,283 1,252	1,516 833
Degenerative heart disease (421, 422) .. .. {	M. F.	31,325 42,897	22,635 32,571	1,669 2,084	3,631 4,696	769 963	2,621 2,583	1,185 1,527	1,111 1,485	1,303 1,567	1,473 1,749	1,129 1,343	1,800 1,808
Other diseases of heart (430-434) {	M. F.	5,943 6,368	4,485 4,902	260 271	298 338	222 261	678 596	225 227	220 224	203 204	121 126	326 364	466 417
Hypertension with heart disease (440-443) .. .. {	M. F.	6,317 8,126	4,959 6,504	409 410	511 671	189 239	249 302	239 289	243 297	319 308	207 250	277 333	171 211
Hypertension without mention of heart (444-447) .. .. {	M. F.	4,058 4,427	3,189 3,538	235 256	294 330	81 62	259 241	154 158	157 161	183 192	119 123	119 86	178 169
Other circulatory diseases (450-468) {	M. F.	8,518 9,891	6,566 7,967	500 505	769 876	149 128	534 415	322 352	322 363	390 380	312 326	219 178	367 290
Influenza (480-483) .. .. {	M. F.	4,360 3,953	3,324 2,980	229 183	335 345	118 112	354 333	165 141	163 136	179 138	136 128	173 156	243 233
Pneumonia (490-493) .. .. {	M. F.	13,563 12,932	11,087 10,769	529 419	1,067 975	330 309	550 460	513 460	544 491	413 315	433 363	484 431	378 322
Bronchitis (500-502) .. .. {	M. F.	21,348 9,141	17,621 7,550	1,341 423	1,415 598	346 170	625 400	808 325	865 344	1,047 318	574 223	508 237	429 280
Other diseases of respiratory system (470-475, 510-527) .. {	M. F.	4,183 1,689	2,958 1,324	536 86	427 112	71 42	191 125	138 60	145 60	418 65	173 42	104 59	131 87
Ulcer of stomach and duodenum (540, 541) .. .. {	M. F.	4,259 1,705	3,371 1,394	197 67	425 139	83 41	183 64	161 61	166 64	154 50	172 52	122 57	126 45
Appendicitis (550-553) .. .. {	M. F.	602 358	464 289	33 13	68 35	12 6	25 15	23 13	23 13	26 10	28 13	18 8	17 10
Intestinal obstruction and hernia (560, 561, 570) .. .. {	M. F.	1,790 1,801	1,368 1,400	74 64	219 204	35 43	94 90	68 64	67 64	58 48	89 76	51 60	65 63

\*Provisional.



Table CIX—continued

Cause of death (and International Classification Numbers)	Sex	Deaths					Death rates per million living						
		Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic*
Gastritis, enteritis and diarrhoea except diarrhoea of newborn (543, 571, 572) .. .. .	M.	1,200	852	63	134	39	112	45	42	49	54	57	77
	F.	1,563	1,227	75	135	42	84	56	56	56	50	59	59
Cirrhosis of liver (581) .. .. .	M.	849	621	46	124	16	42	32	30	36	50	23	29
	F.	699	511	28	119	23	18	25	23	21	44	32	73
Nephritis and nephrosis (590-594) {	M.	2,930	2,153	192	252	78	255	111	106	150	102	114	175
	F.	2,525	1,858	156	259	56	196	90	85	117	96	78	137
Hyperplasia of prostate (610) ..	M.	4,357	3,337	308	389	108	215	165	164	240	158	159	148
Complications of pregnancy, child- birth and puerperium (640-689)	F.	509	320	29	46	33	81	18	15	22	17	46	57
	M.	3,327	2,424	165	390	108	240	126	119	129	158	159	165
Congenital malformations (750- 759) .. .. .	F.	3,055	2,177	164	328	136	250	109	99	123	122	190	175
	M.	3,695	2,653	199	473	126	244	140	130	155	192	185	168
Birth injuries, postnatal asphyxia and atelectasis (760-762) ..	F.	2,338	1,694	135	289	73	147	83	77	102	108	102	103
	M.	56	20	2	8	6	20	2	1	2	3	9	14
Diarrhoea of newborn (764) .. {	F.	35	12	1	10	4	8	1	1	1	4	6	6
Other infections of newborn (763, 765-768) .. .. .	M.	656	431	29	78	29	89	25	21	23	32	43	61
	F.	427	290	23	40	16	58	15	13	17	15	22	41
Other diseases of early infancy and immaturity unqualified (769-776) {	M.	3,096	2,123	161	370	106	336	117	104	126	150	156	231
	F.	2,221	1,557	105	260	98	201	79	71	79	97	137	141
Senility without mention of psy- chosis, ill-defined causes and un- known causes (790-795) {	M.	4,377	2,434	263	281	234	1,165	166	120	205	114	343	800
	F.	6,967	4,382	407	446	334	1,398	248	200	306	166	466	978
All other diseases (remainder of 001-795) .. .. .	M.	10,359	7,325	526	1,009	324	1,175	392	360	411	409	476	807
	F.	13,596	10,083	697	1,433	311	1,072	484	460	524	534	434	750
Motor vehicle accidents (E810- E835) .. .. .	M.	4,369	3,467	206	436	125	135	165	170	161	177	183	93
	F.	1,443	1,167	58	127	36	55	51	53	44	47	50	38
All other accidents (E800-E802, E840-E962) .. .. .	M.	7,372	5,360	437	1,039	167	369	279	263	341	421	245	253
	F.	6,345	4,929	274	740	147	255	226	225	206	276	205	178
Suicide and self-inflicted injury (E963, E970-E979) .. .. .	M.	3,521	3,018	152	262	31	58	133	148	119	106	46	40
	F.	2,338	2,060	86	158	19	15	83	94	65	59	26	10
Homicide and operations of war (E964, E965, E980-E999) {	M.	258	207	11	26	7	7	10	10	9	11	10	5
	F.	147	127	2	13	2	3	5	6	2	5	3	2

\*Provisional.

# INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS

## United Nations

### Population Commission

Almost exactly ten years after the date of the first meeting, representatives of all 15 Member States met in New York on the 25th February 1957 to begin the ninth session of the Population Commission. The United Kingdom was represented by Mr. B. Benjamin of the General Register Office. As at the previous session held two years earlier, Mr. J. T. Marshall (Canada) was elected to the Chair with Mr. J. Mertens de Wilmars (Belgium) Vice-Chairman and Mr. Benjamin *Rapporteur*.

The beginning of the Report<sup>1</sup> on this session, where the Secretary-General is complimented on a concise and well-documented summary of the known facts about world population and demographic trends, is an apt commentary on the policy pursued during these ten years. Right from the start the Commission has stressed the need for a better basis on which to gauge changes in the size and structure of populations. The practical aim has been to extend the coverage of census and vital statistics, to improve their quality and to encourage the use of common definitions and standards so that figures of one country are comparable with those of another. But the Commission was by no means complacent, for its remarks were tempered by a reminder that much had yet to be done, especially by improving or extending registration services in African, Asian and Latin American countries.

The tenor of the proceedings and the terms of the two draft resolutions<sup>2</sup> recommended by the Commission to the Economic and Social Council were consistent with the United Nations' current policy of applying the greater part of available resources to the needs of less developed countries. They also re-echoed the warning note sounded at the eighth session, when the Commission laid special emphasis on the hazards of failing to take account of the inter-action of population changes and economic development. One resolution focused attention on the need to improve census and vital statistics in Africa, the other aimed at encouraging governments to help the United Nations to meet increasing demands for technical assistance.

The latter was a reference to the difficulty of recruiting experts on short term assignments. To meet this, the Commission asked the Secretary-General to consider the desirability of providing for the establishment of one or two permanent posts to be filled by demographers who would be qualified and available for technical assistance missions as required. The Commission hoped that such an arrangement offering career prospects would attract candidates of high calibre.

In the meantime posts for demographic experts had been established in the Social Affairs Divisions of the Economic Commission for Asia and the Far East and the Economic Commission for Latin America and at the Regional Social Affairs Unit in the Middle East. The aim was two-fold: to lessen demands on the headquarters' Secretariat, while at the same time preserving a link between headquarters and the regions on population matters, and to meet some of the requests from governments in the regions for technical assistance in demography.

Two important developments then taking place were reported to the Commission. *Regional demographic research and training centres* were being set up in Chile (Santiago) and India (Bombay) with the aid of technical assistance and

a third—somewhere in Africa—was in prospect. The importance of centres of this kind is that they enable governments to get formal training in demography and statistics for their officials, in addition to providing an opportunity for officials to meet and compare notes. The Commission was informed that two seminars had been held in 1955, one at Bandung (for Asia and the Far East) and the second at Rio de Janeiro (for Latin America). The Middle East and Africa were mentioned as areas in which it was also intended to hold seminars. The Commission noted that an African Seminar on Vital and Health Statistics, sponsored jointly by the Commission for Technical Co-operation in Africa South of the Sahara and the World Health Organization, had been held in Brazzaville, French Equatorial Africa, in 1956.

Other technical assistance matters reported to the Commission included the Report on the study of population in Mysore State, India, then said to be nearing completion, and a pilot survey under way in the Philippines. This survey was designed to assess the value of national sample surveys as a means of obtaining information on demographic aspects of manpower, employment and similar problems that cannot be readily obtained from the census—in addition to providing data needed by the Government of the Philippines for planning economic and social development. There was also a proposal for a second demographic pilot study in a densely populated area in the ECAFE region. The Commission signified its confidence in the value of such projects by suggesting that a third study should be considered.

In the form of a second draft of *General Principles for a Population Census*<sup>3</sup> the Commission reviewed at some length the considerable progress that had been made since the time when, at the first session in 1947, recommendations for improving comparability between national censuses were first made. The *Principles* were then at a point where they had been modified in the light of amendments proposed at some regional meetings; other regional discussions, including the European, had not been completed.

Representatives of under-developed countries showed continued interest in the possibility of studies on internal migration in relation to economic and social development. The Secretary-General discussed the possibilities in a note which dealt primarily with questions of definition and measurement. The Commission was informed that a French edition of *The Determinants and Consequences of Population Trends*<sup>4</sup> had been published and that a Spanish edition was in the press. The second printing of the English edition had been exhausted and the Commission asked for a third.

The Commission's Report urged governments, among other things, to make a scientific approach to population growth in relation to industrial development. Reference was made to a number of published papers giving background: in addition to *The Determinants and Consequences of Population Trends*<sup>4</sup>, there was *Population Growth and the Standard of Living in Under-Developed Countries*<sup>5</sup>, the *Population of Central America (including Mexico) 1950-1980*<sup>6</sup> and the *Population of South America 1950-1980*<sup>7</sup>.

### **Economic and Social Council: Twenty-third session**

The *Report of the ninth session of the Population Commission*<sup>1</sup> was on the agenda for this session of the Council when it met at the United Nations' Headquarters in New York on the 16th April 1957. Seventeen of the 18 delegations represented spoke when the Report was considered by the Council's Social Committee on the 18th April. There was general approval for the work of the Commission; the Report and proposed future programme were well received. The Committee shared the view of the Commission that the Secretariat should concentrate on work directly connected to economic and social



problems. The Council took note<sup>8</sup> of the Report and, in plenary session on the 7th May 1957, unanimously adopted the two draft resolutions proposed by the Commission.

On the recommendation of its Economic Committee the Council also adopted a resolution on *industrialization*<sup>9</sup> which was directed more particularly to the needs of the Middle East and Africa. Its main purpose was to request the Secretary-General to consider the possibility of organizing seminars, consultations and training centres in addition to collecting essential up-to-date economic data.

Three of the five retiring members of the Population Commission—the United Kingdom, the United States and the USSR—were re-elected by the Council for a further period of four years. The other retiring members, namely Costa Rica and India, were replaced by El Salvador and Japan<sup>10</sup>.

### General Assembly: Twelfth session

When the Second (economic) Committee of the United Nations' General Assembly was debating whether to sanction a special fund for economic development, the Peruvian delegation introduced a five-power draft resolution<sup>11</sup> which aimed at stressing the need to take account of the inter-play of economic factors and population changes, especially in countries where economic development is in progress. The other sponsors were Brazil, Italy, Mexico and Pakistan. Though lacking unanimity in the matter of the special fund, the Assembly adopted the resolution on demographic questions<sup>12</sup> which, among other things, requested the Economic and Social Council "to include pertinent information concerning the demographic activities of the Council in the chapter on economic development of its annual report to the General Assembly". This created an important precedent because it means that population questions, hitherto the preserve of the Third (social) Committee, will also be looked at by the Second Committee—an indication perhaps that the United Nations is beginning to recognize that the economic consequences of population changes are at least as important as their social implications.

### Conference of European Statisticians

The fifth plenary session of the Conference was held in Geneva from the 17th to the 21st June 1957. Mr. H. Campion, Director of the Central Statistical Office, who led the United Kingdom delegation, was in the Chair. Reports before the Conference included that on the second session of the Working Group on Censuses of Population and Housing<sup>13</sup> held in November 1956. (See page 263 of Part III of the 1956 *Review*.)

The Working Group had recommended that the *Rapporteurs* who had previously formulated proposals for the classification of persons by socio-professional groups should be reconvened. They met again in May 1957. Their modified proposals on the classifications of the population (a) by type of activity, (b) by status, (c) by socio-professional groups and (d) of the whole population by social and economic characteristics<sup>14</sup> were reviewed by the Conference and referred to the Working Group, which met later in the year (see below), for detailed consideration. In its Report<sup>15</sup> the Conference also invited statistical offices to arrange for information about plans for the next round of Censuses to be pooled through the Secretariat, especially on sampling methods and organizational procedures.

The Conference also considered a memorandum on the timing of various censuses, the inter-relationship between censuses and the relation between censuses and short-period statistics<sup>16</sup> which the United Kingdom had been asked to prepare.

## European Working Group on Censuses of Population and Housing

At the third session, held in Geneva from the 9th to the 14th December 1957, the United Kingdom was again represented by Mr. B. Benjamin and Mr. W. J. Littlewood of the General Register Office.

The social and economic classifications proposed by the *Rapporteurs* (see above) were considered at this session in some detail against the background of national comments on the proposals. A strong measure of agreement was reached and recommendations were made both for basic groups to be included in the classifications and for optional sub-divisions of some of the groups which were considered to be useful.<sup>17</sup>

The Working Group also devoted some time to the subject of household and family statistics. A sub-group, with Mr. Benjamin as Chairman and *Rapporteur*, was set up to clarify the different concepts of household, family and dwelling, to draw up a tentative classification of families and households by structural types and to consider the main problems of dependency statistics. The work of the sub-group enabled the Working Group to reach agreement on the first and third of these items, but shortage of time precluded discussion on problems of classification. The sub-group's recommendations on these were reproduced in an annex to the Report<sup>17</sup> of the Working Group.

## World Health Organization

### Executive Board

The Board met as usual in January and in May. At the second meeting, the twentieth session, the Fifth Report of the Expert Committee on Health Statistics<sup>18</sup> was approved for publication.

### The Tenth World Health Assembly

The United Kingdom delegation to the Assembly, held in Geneva from the 7th to 22nd May, included Mr. L. M. Feery, General Register Office.

The Assembly's attention was drawn to the Director-General's emphasis, in reporting on WHO's work in 1956<sup>19</sup>, on the fundamental importance of statistical compilation and analysis to the growing need for more precise information about health in many parts of the world. He stated that health statistics were available for the whole of some 30 countries only and for selected towns in a few others. Elsewhere the systematic knowledge of health conditions essential to planning improvements in public health was lacking. This information disposed the Assembly to support a Resolution<sup>20</sup> introduced by the United States delegation with the object of getting the Director-General to cast a critical eye on existing arrangements and to consider whether WHO could do more to assist countries to remedy defects and fill gaps in health statistics.

Widespread agreement, especially among the delegations of developed countries, that the epidemiological study of cancer is potentially a useful method of research into its aetiology resulted in the presentation of a draft resolution jointly sponsored by Australia, France, Holland, Iran, Poland, the United States and the United Kingdom. In debate the proposed resolution had the additional support of Denmark, Egypt, Finland, the Irish Republic, Norway, the Philippines, Sweden and the Soviet Union. The Resolution<sup>21</sup>, as adopted by the Assembly, requested the Director-General:

(1) to continue the collection and publication of international statistics, mainly of mortality, but also of morbidity so far as practicable;

(2) to continue work on formulating international definitions of nomenclature and statistical classification, including cancer staging;



(3) to provide an advisory centre on the objectives and methods of cancer registration;

(4) to consider the desirability and urgency of both co-ordinating and expanding work on cancer epidemiology and statistics in order to contribute more effectively to national needs through improved international liaison; and

(5) to include in the epidemiological work on cancer, due reference to occupational and other environmental conditions likely to have an influence on the frequency of the various forms of the disease and therefore an etiological significance.

#### **Expert Committee on Health Statistics: Sub-Committee on Cancer Statistics**

At the third session of the Sub-Committee, held in Geneva from 9th to 14th December, Dr. W. P. D. Logan of the General Register Office was elected Chairman and also acted as *Rapporteur*.<sup>22</sup>

The Fifth Report of the Expert Committee<sup>18</sup> gave an account of progress that had been made since the Sub-Committee last met, especially in the establishment of cancer registers in various countries, the compilation of a clinical-stage classification of malignant neoplasms, the development of techniques for ascertaining the incidence and prevalence of cancer in the population, and the expansion of statistical studies of the aetiology of cancer. The Sub-Committee reviewed these recent developments, defined the terms "incidence" and "prevalence" and discussed difficulties encountered in producing reliable statistics; the scope of available information and of studies based on cancer registers was also considered. Statistical methods could contribute to the study of the aetiology of cancer in two main ways: (a) as an auxiliary to experimental and clinical cancer research and (b) as the foundation of epidemiological studies; and only evidence on the incidence of malignant neoplasms in human beings would decide the extent to which the numerous carcinogenic factors known were significant with regard to man. The Sub-Committee noted that malignant tumours were classified in greater detail in the Seventh Revision of the International Statistical Classification and that the International Union Against Cancer had prepared a draft Histological Nomenclature of Human Tumours. The latter was intended for use in pathology, rather than for statistical purposes. The Sub-Committee recommended continued studies to ascertain how far diagnoses of malignant tumours reported in death certificates could be accepted as reliable.

#### **WHO Centre for the Classification of Diseases**

The WHO Centre, located at the General Register Office under the direction of Dr. W. P. D. Logan, was mainly engaged during the year in helping the Secretariat at Geneva with the preparation of an Index to the revised *International Statistical Classification of Diseases, Injuries and Causes of Death*. The revised index cards were despatched to Geneva, and thereafter Mr. H. G. Corbett of the General Register Office made a series of visits to check and assist in the preparation of the Index.

Other activities included the coding of 3,000 entries according to the Seventh Revision using, for purposes of comparison, a different method of selecting the underlying cause. The Latin American Centre sent 500 certificates of cause of death in Spanish to be coded so that differences in coding could be considered. Work also continued on the multiple-cause analyses of selected diseases.

#### **Symposium on the Public Health Aspects of Chronic Disease**

This Symposium, under the auspices of the WHO Regional Office for Europe, was held in Amsterdam from 30th September to 5th October. Thirteen



countries were represented and Dr. W. P. D. Logan was elected *Rapporteur*. The Symposium considered four major chronic disease groups: malignant neoplasms, diabetes mellitus, cardiovascular diseases and rheumatism. Particular attention was paid to the age-group 40–64 years—that of later working life.

In discussing epidemiological research, it was agreed that morbidity statistics were of potentially greater value than mortality statistics, but they were more difficult to obtain. Hospital and social security statistics form the major sources of morbidity data in most countries where they are available but special schemes, such as cancer registration and the collection of special statistics of cardiovascular disease, might be more widely used. Noting the large differences among the European countries in recorded mortality from atherosclerotic heart disease, the Symposium suggested that the WHO Regional Office for Europe should take steps to find out the extent to which these were real and not differences arising from variations in diagnosis, nomenclature or statistical method.

### **Inter-American Seminar on Classification of Diseases**

This Seminar was held in Caracas from 26th to 30th August 1957.<sup>23</sup> Dr. W. P. D. Logan attended in his capacity of Head of the WHO Centre for the Classification of Diseases. The Seminar provided an opportunity of explaining the 1955 revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death and of encouraging all countries to use both the Classification and the recommended form of medical certificate. It also aimed at improving medical certification in the Americas and in establishing closer working relations between countries and the Latin American Centre. In addition to these general matters the Seminar dealt with three topics in more detail: the classification of the diarrhoeal diseases, methods of improving and extending medical certification, and the use of the International List in hospitals.

## **International Labour Organisation**

### **Ninth International Conference of Labour Statisticians**

A final draft of the major, minor and unit groups of an International Standard Classification of Occupations (I.S.C.O.) was on the agenda paper when the Conference met in Geneva from 24th April to 3rd May. Mr. W. J. Littlewood, United Kingdom member of the Working Group on this classification (see page 232 of the corresponding part of the *Review* for 1955), was *Rapporteur* of the Conference's I.S.C.O. Committee.

The major groups of the Classification were settled when the Seventh International Conference of Labour Statisticians<sup>24</sup> met in 1949 and the minor groups were filled in by the Eighth Conference<sup>25</sup> in 1954. Although the Classification had taken a long time to evolve, the Conference was not entirely satisfied with it. The wish to have it available in time for use in connection with the 1960 round of censuses favoured its adoption and the Conference resolved that "The Classification in its present form will serve, for the time being, as a useful means of reporting occupational data intended for international comparisons".<sup>26</sup>

## **Other Meetings**

### **International Statistical Institute**

The Registrar General was represented by Mr. W. J. Littlewood at the 30th regular session of the Institute, held in Stockholm in August 1957. Fertility statistics, census plans for the nineteen sixties and the electronic computer as a statistical tool were some of the subjects discussed. On a resolution proposed by the Committee on Statistics of Large Towns the Institute also considered the general question of municipal statistics.

## World Congress of Psychiatry

Miss E. M. Brooke of the General Register Office attended the Second World Congress of Psychiatry held at Zurich from 1st to 7th September 1957. The Congress was attended by some 3,000 people who presented a wide selection of papers. The main theme was the current state of knowledge about the "Group of Schizophrenias" and Miss Brooke contributed a paper on Schizophrenia in relation to occupation.

## Permanent International Committee on Industrial Medicine: Conference on Sick Absence Statistics

The main purpose of this Conference, held in Leyden from 10th to 12th October 1957, and attended by Dr. W. P. D. Logan, was to get agreement on methods of dealing with statistics of sickness absence before national developments became too settled, perhaps without regard to the matter of international comparability.

### Visitors from overseas

There were 35 visitors from 22 Commonwealth and foreign countries to the General Register Office during 1957. The majority were officials sent by their Governments or who had been awarded fellowships by the United Nations, the World Health Organization or under the Colombo Plan to study registration procedure and vital and health statistics. One Fellow began a 12 months' course of training during the period. Other visitors included senior officials who took the opportunity for discussions while in London.

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# THE REGISTRATION SERVICE

## Searches and certificates

Table T1 of Part II shows the growth in the registers of births, marriages and deaths since 1866 and the extent to which the registers and indexes have been used in a series of years since then.

The number of searches paid for by the public in 1957, at 229,685, was the highest since 1952. The number of searches undertaken for Government departments, mainly to verify ages of applicants for retirement pensions, declined to 279,218 after an increase in 1956 due to the verification, for national insurance purposes, of the births of persons entering at late ages into national insurance in 1948. The verification of a further 36,000 births in this group, which was carried out in 1957, is included in this total.

The number of certificates issued from the registers in 1957, at 317,616, was the highest since 1948, when the demand was exceptionally high on account of post-war resettlement and the introduction of new social legislation. Table T2 shows that this increase applied to birth, marriage and adoption certificates, but not to death certificates. The proportion of short birth certificates to all birth certificates issued by the General Register Office remained almost the same as in 1956 at 46.4 per cent.

## Re-registration of births of legitimated persons

If the parents of a child marry after the child's birth, the marriage will in certain circumstances legitimate the child. In these cases the birth should be re-registered to show the child as a legitimate child of its parents; but the date when the parents apply for re-registration may be determined more by the need to produce a birth certificate, e.g. for entry to school, than by the date of the marriage which legitimated the child. The Legitimation (Re-registration of Birth) Act, which was passed in 1957, clarified the law relating to power to re-register a small number of these births about which there had been doubt; but it does not have any material effect on the numbers re-registered.

Table T3 shows the number of births re-registered in each year since 1927, the year after provision was first made for re-registration. Attention was drawn in the 1956 *Review* to fluctuations in the numbers during the 30 years 1927 to 1956. The relative stability in the figures since 1951 continued in 1957, when 2,511 births were re-registered.

## Adopted children

The number of entries in the Adopted Children Register are shown in Table T4 for each year since 1951 and for groups of years from 1927 to 1955 (the original provision for the register was made in 1926). From a peak of more than 21,000 entries in 1946, there was a drop to less than 13,000 entries in 1950. The figure of 13,403 in 1957 continued the fairly constant annual rate of adoption since that date. Table T4 also shows the number of orders made by each type of court. In the period 1927-30, 90 per cent of all orders were made by Courts of Summary Jurisdiction, 7 per cent by County Courts and 3 per cent by the High Court; by 1957 the proportion of orders made by the County Courts had risen to 41 per cent, the proportion made by Courts of Summary Jurisdiction fell to 58 per cent and less than 1 per cent were made by the High Court. Table T5 shows that 42 per cent of the children concerned were adopted by relatives, the mother and her husband in the great majority of cases.

## **THE NATIONAL HEALTH SERVICE CENTRAL REGISTER**

During the year 1957, the National Health Service Central Register (which is maintained by the General Register Office on an agency basis) received notifications of 1,557,472 persons who were reported as having registered with doctors for the first time. It was found from the register that 194,646 of these were already on doctors' lists.

The Central Register also notified Executive Councils of the names of 1,002,544 persons for removal from doctors' lists by reason of death (500,959), enlistment (154,799), embarkation (344,308), or becoming long term patients in mental hospitals (2,478). It was not in fact possible for Executive Councils to remove from doctors' lists all the persons notified to them in this way, because, in many cases, there were insufficient identifying particulars. In addition, 1,361,810 persons were notified as having changed their doctor on removal from the area of one Executive Council to another.

# PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

## Electoral registers

As required by the Electoral Registers Act, 1949, and the Representation of the People Act, 1949, a local register based on a canvass is prepared in the autumn of each year, distinguishing between those who are parliamentary and local government electors by virtue of residence on the qualifying date, and local government electors who on the qualifying date had a non-resident qualification by occupying as owner or tenant any rateable land or premises of not less than £10 rateable value per occupier. There is also a service register for any members of the Armed Forces and other persons employed in the service of the Crown in a post outside the United Kingdom, and for their wives if with them.

A person not of full age on the qualifying date but of full age on the following 15th June is to be included on the register though there is no entitlement to vote in any election before the 2nd October. Such persons are shown separately as "Young Electors" in Table CX; the 1951 register was the first to be affected in this way.

The qualifying date is 10th October in England and Wales and the registers must be used for elections falling within the twelve months beginning on 16th February of the following year.

## Total electorate

The particulars recorded in Tables U and V for 1957 have been taken from statements furnished to the Registrar General by Electoral Registration Officers and Clerks to local authorities and relate to the register which came into force on 16th February 1957.

Table U refers to parliamentary and Table V to local government electors and elections. From these tables has been extracted the summary in Table CX.

**Table CX. Parliamentary and local government electors, 1953 to 1957, England and Wales**

Register (qualifying date in brackets)	Parliamentary Register				Local Government Register
	Total at qualifying date	Services Register (included in col. 2)	“ Young Electors ” (not included in cols. 2 and 3)		
			Total	Services (included in col. 4)	
1	2	3	4	5	6
1953 (20th Nov. 1952) ..	30,491,691	274,646	225,429	11,145	30,606,472
1954 (20th Nov. 1953) ..	30,525,190	276,156	212,229	15,001	30,640,141
1955 (10th Oct. 1954) ..	30,590,931	285,376	242,907	19,578	30,707,251
1956 (10th Oct. 1955) ..	30,679,509	289,615	248,420	18,259	30,795,617
1957 (10th Oct. 1956) ..	30,737,369	295,084	243,793	22,593	30,855,871



The number of parliamentary electors registered in England and Wales corresponds almost exactly with the estimated *total* population aged 21 and over excluding aliens resident here and those categories not qualified to vote. This indicates that the discrepancies in different constituencies, due mostly to time lags in adding names to the registers or removing them, largely cancel out when aggregated for England and Wales as a whole. The percentages which the total parliamentary electorate represented of the estimated *total* population in the years 1953 to 1957 were :

1953	1954	1955	1956	1957
68·8	68·6	68·6	68·4	68·2

The proportion of the *total* population included in the local government register was 68·5 per cent in 1957. This is a slightly higher proportion than the parliamentary register mainly because of the local government electors with non-resident qualifications. There are about 118 thousand of these in England and Wales.

### Local government elections in urban areas

Table CXI shows the percentage of the electorate voting in contested local government elections in each year between 1950 and 1957, classified by the type of local authority area. (No reference is made here to county council elections which are held every three years and did not take place in 1957.)

**Table CXI. Local government elections. Percentage of electorate voting in contested elections, 1950 to 1957, England and Wales**

District	1950	1951	1952	1953	1954	1955	1956	1957
County boroughs .. .. .	45·5	44·4	49·9	45·2	42·8	43·8	37·6	40·0
Metropolitan boroughs, municipal boroughs and urban districts ..	47·9	45·9	50·9	46·8	45·7	45·0	39·4	44·1
Rural districts .. .. .	46·3	45·2	52·0	47·3	47·1	48·2	41·3	45·2
<b>Total .. .. .</b>	<b>46·7</b>	<b>45·1</b>	<b>50·6</b>	<b>46·2</b>	<b>44·3</b>	<b>44·8</b>	<b>38·7</b>	<b>42·2</b>

In 1957 the proportion voting was lower in county boroughs than in municipal boroughs and urban districts, where the proportion was in turn lower than in rural districts. In 1957 the difference between county boroughs and other urban areas was greater than the difference between the other urban areas and rural districts, and in general this has been true of the earlier years shown in Table CXI. Since 1951, the proportion of the electorate voting in contested elections in county boroughs has been lower than in rural districts, but the position of the other urban areas relative to the other types of area has varied from year to year.

Table CXII shows the percentage of the electorate who voted in contested elections in all urban areas classified by the size of the total electorate in the area.

Table CXII. Local government elections. Percentage of electorate voting in contested elections in urban areas, 1957, England and Wales

Electorate at qualifying date	Percentage of electorate voting												Total number	Total electorate	Electorate voting	Percentage of electorate voting	
	Percentage of electorate voting																
	Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75 and over					
County boroughs																	
Under 50,000	..	—	—	4	1	6	3	2	—	—	—	—	16	464,283	222,330	47.9	
50,000-..	..	—	1	3	3	5	4	1	—	—	—	—	17	659,372	301,202	45.7	
70,000-..	..	—	2	6	1	6	2	1	1	—	—	—	19	1,176,662	515,859	43.8	
100,000-..	..	1	—	4	6	5	1	—	—	—	—	—	20	2,297,742	928,039	40.4	
200,000 and over	..	—	3	5	1	—	—	—	—	—	—	—	9	3,158,718	1,138,790	36.1	
Total	..	1	—	22	12	22	10	4	1	—	—	—	81	7,756,777	3,106,220	40.0	
Municipal boroughs and urban districts																	
Under 5,000	..	4	2	4	13	19	14	15	16	17	15	8	4	131	382,885	195,861	51.2
5,000-..	..	3	5	5	12	12	24	24	24	13	10	2	1	135	738,300	364,552	49.4
10,000-..	..	1	5	10	18	28	26	29	22	12	7	—	—	158	1,479,888	704,625	47.6
20,000-..	..	—	1	16	15	40	39	24	14	2	1	—	—	152	3,668,148	1,643,969	44.8
50,000 and over	..	2	6	3	5	11	10	—	—	—	—	—	—	37	2,376,100	906,494	38.2
Total	..	10	19	38	63	110	113	92	76	44	33	10	5	613	8,645,321	3,815,501	44.1

Among county boroughs which are shown in the first section of Table CXII there was a significant tendency for the percentage voting to fall as the size of the total electorate increased. In county boroughs with less than 50,000 in their total electorate 47·9 per cent of the electorate voted in contested elections compared with 36·1 per cent in those county boroughs with a total electorate of 200,000 or more. It appears that the rate of decrease lessens with the increasing size of the electorate. Among the 15 county boroughs in which more than half the electorate voted in contested elections, 10 had total electorates of less than 70,000 and only one had a total electorate of more than 100,000. Conversely, among the 10 county boroughs where less than 35 per cent of the electorate voted in contested elections seven had total electorates of 100,000 or more, while among the nine county boroughs with total electorates of 200,000 or more, only one (Bradford C.B. with 200,175 electors) had more than 40 per cent of the electorate voting in contested areas in local council elections in 1957. The extremes in the percentage of the electorate voting in contested elections ranged from Blackburn (60·6), Burnley (58·3) and Eastbourne (57·4) to West Ham (21·5), Stoke-on-Trent (32·6), Newcastle upon Tyne (32·7) and East Ham (32·8).

The second section of Table CXII shows that in municipal boroughs and urban districts there was a similar tendency for the proportion of the electorate voting in contested elections to fall as the size of the total electorate increased. Municipal boroughs and urban districts with total electorates of less than 5,000 had 51·2 per cent of their electorate voting in contested areas, this being the only group of urban areas for which the proportion was over half. The proportion of the electorate voting decreased with the size of the total electorate, to 38·2 per cent for areas with a total electorate of 50,000 or more. Among the municipal boroughs and urban districts with total electorates of less than 5,000, 75 out of the total of 131 had more than half the electorate voting in contested areas, that is 57 per cent, and this percentage was only slightly less, at 55 per cent, for the 135 areas with total electorates between 5,000 and 10,000. The proportion of areas with more than half the electorate voting in contested areas fell to 44 per cent for areas with total electorates between 10,000 and 20,000, and to 27 per cent for those with between 20,000 and 50,000 in their total electorates. All the municipal boroughs and urban districts with total electorates of more than 50,000 had less than half the electorate voting in contested areas. This last group of urban areas are geographically concentrated; among 37 such areas, 23 are within the Greater London Conurbation and four more are only a short distance outside. The range in the proportion of the electorate in contested elections who voted was rather greater for municipal boroughs and urban districts than for county boroughs. The highest percentage voting in this group was recorded in Chepstow U.D. (82·0), which is an area with fewer than 5,000 total electorate, as were three out of the four areas which had between 75 and 80 per cent of the electorate voting in contested elections. The areas in this group with the lowest percentage voting were Teignmouth U.D. (17·6), Barton-upon-Humber U.D. (18·0) and Wantage U.D. (19·3).

### Central Index of Service Voters

During 1957, the Central Index of Service Voters (which is maintained by the General Register Office on an agency basis) received from Electoral Registration Officers 57,119 declarations by persons qualified to be included in the electoral registers as service voters. The categories of persons qualified as service voters are:

- (i) any person who is a member of H.M. Forces;



- (ii) any person employed in the service of the Crown in a post outside the United Kingdom;
- (iii) any woman who is the wife of a service voter and is residing outside the United Kingdom to be with her husband.

A further 30,148 declarations were received in respect of persons under the age of 21 years. The Central Index notified Electoral Registration Officers of 38,882 persons who had made declarations before reaching the age of 21 years but who, during 1957, attained that age. Altogether 96,001 new service voters were added to the electoral registers.

In the same period Electoral Registration Officers were notified of 93,788 names of persons whose declarations ceased to be in force, and 21,814 declarations by persons under full age were cancelled because they ceased to have a service qualification before attaining full age.

# APPENDIX A

## FERTILITY RATES BY BIRTH ORDER, ENGLAND AND WALES, 1957

Live births per woman married once only, irrespective of parity

Figures are rounded and may not add to totals

1957

Calendar year of marriage	Age at marriage																	Calendar year of marriage			
	All ages under 45							Under 20							20-24				25-29		
	Number of previous children																				
	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more			
1957	-106	-105	-001	-000	-000	-000	-186	-185	-001	—	—	—	-084	-083	-001	-000	-000	-000			
1956	-339	-320	-019	-001	-000	-000	-418	-385	-033	-000	-000	-000	-324	-309	-015	-001	-000	-000			
1955	-247	-154	-087	-006	-000	-000	-297	-147	-142	-008	-000	-000	-237	-162	-068	-006	-001	-000			
1954	-224	-094	-107	-021	-002	-000	-267	-077	-147	-040	-003	-000	-243	-162	-076	-005	-000	-000			
1953	-213	-067	-103	-035	-007	-001	-259	-054	-129	-063	-013	-001	-218	-076	-104	-032	-006	-001			
1952	-187	-046	-087	-039	-012	-003	-229	-034	-099	-065	-025	-005	-196	-053	-093	-037	-011	-002			
1951	-160	-032	-068	-039	-015	-006	-205	-026	-075	-061	-029	-012	-169	-037	-076	-038	-013	-005			
1950	-143	-022	-055	-038	-018	-010	-189	-018	-057	-056	-035	-022	-153	-026	-062	-039	-016	-009			
1949	-109	-014	-038	-030	-016	-012	-150	-011	-040	-043	-029	-027	-117	-016	-043	-031	-015	-011			
1948	-091	-010	-027	-026	-015	-014	-134	-008	-029	-039	-027	-031	-098	-012	-032	-027	-014	-013			
1947	-078	-007	-021	-022	-014	-015	-121	-007	-023	-033	-026	-033	-084	-008	-024	-024	-014	-015			
1946	-063	-004	-014	-017	-012	-015	-106	-005	-018	-027	-022	-034	-069	-005	-016	-020	-013	-015			
1945	-053	-003	-011	-015	-010	-014	-090	-003	-015	-021	-019	-031	-057	-004	-013	-016	-011	-014			
1944	-045	-002	-008	-012	-009	-014	-074	-003	-010	-017	-016	-029	-049	-003	-009	-014	-010	-014			
1943	-039	-002	-006	-010	-008	-013	-065	-002	-008	-015	-014	-026	-043	-002	-008	-012	-009	-013			
1942	-033	-002	-005	-008	-007	-011	-060	-002	-007	-014	-012	-025	-036	-002	-006	-009	-008	-011			
1941	-026	-001	-003	-006	-005	-010	-054	-001	-005	-011	-012	-025	-029	-001	-004	-008	-005	-010			
1940	-021	-001	-003	-005	-004	-008	-051	-001	-005	-011	-010	-024	-024	-001	-003	-006	-005	-009			
1939	-016	-000	-001	-003	-003	-008	-047	-001	-003	-008	-008	-027	-019	-000	-002	-004	-004	-008			
1938	-012	-000	-001	-002	-002	-006	-040	-001	-002	-006	-006	-026	-014	-000	-001	-003	-003	-007			
1937	-009	-000	-001	-001	-002	-005	-038	-001	-002	-004	-006	-026	-010	-000	-001	-002	-002	-006			
1936	-006	-000	-000	-001	-001	-004	-030	-000	-001	-003	-004	-022	-007	-000	-000	-001	-001	-004			
1935	-004	-000	-000	-000	-001	-003	-021	-000	-001	-002	-003	-016	-005	-000	-000	-001	-001	-004			
1934	-003	-000	-000	-000	-000	-002	-016	-000	-001	-001	-002	-012	-003	-000	-000	-000	-000	-002			
1933	-002	-000	-000	-000	-000	-001	-012	-000	-000	-001	-001	-010	-002	—	-000	-000	-000	-001			
1932	-001	-000	-000	-000	-000	-001	-010	-000	-000	-001	-001	-008	-001	-000	-000	-000	-000	-001			

1957—continued

Calendar year of marriage	Age at marriage																		Calendar year of marriage
	30-34						35-39						40-44						
	Number of previous children																		
	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1957	.074	.071	.001	.001	.000	.000	.055	.052	.001	.001	.000	.000	.016	.016	.000	.000	.000	.000	1957
1956	.306	.289	.014	.002	.000	.001	.207	.193	.012	.000	.001	.001	.055	.053	.002	.001	.000	.000	1956
1955	.210	.140	.060	.006	.001	.002	.131	.092	.035	.003	.001	.001	.027	.021	.005	.001	.000	.000	1955
1954	.175	.076	.081	.014	.002	.002	.096	.042	.045	.006	.002	.001	.015	.009	.005	.001	.000	.000	1954
1953	.152	.048	.073	.024	.005	.002	.063	.021	.028	.010	.003	.001	.005	.003	.001	.001	.000	.000	1953
1952	.124	.031	.058	.025	.008	.002	.044	.014	.019	.008	.003	.001	.003	.002	.001	.000	.000	.000	1952
1951	.099	.025	.039	.024	.008	.004	.025	.006	.011	.006	.002	.001	.003	.002	.001	.000	.000	.000	1951
1950	.080	.014	.031	.020	.009	.005	.018	.004	.006	.004	.002	.001	.001	.001	.001	.001	.001	.001	1950
1949	.054	.007	.018	.015	.009	.005	.008	.001	.003	.002	.001	.001	.001	.001	.001	.001	.001	.001	1949
1948	.035	.003	.010	.010	.006	.006	.005	.001	.001	.001	.000	.001	.001	.001	.001	.001	.001	.001	1948
1947	.026	.003	.007	.007	.004	.005	.002	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	1947
1946	.015	.001	.004	.004	.003	.003													1946
1945	.010	.001	.002	.003	.002	.002													1945
1944	.005	.000	.001	.001	.001	.001													1944
1943	.002	.000	.001	.001	.000	.001													1943
1942	.002	.000	.000	.000	.000	.001													1942



## APPENDIX B

### INTERNATIONAL CLASSIFICATION OF DISEASES, 1955 REVISION— COMPARABILITY WITH 1948 LIST

From the beginning of 1958 statistics of cause of death have been compiled in accordance with the Seventh (1955) Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death.

On the recommendation of the World Health Organization's Expert Committee on Health Statistics, the timing of the decennial revisions of the International Lists has been altered so that revision takes place in years ending in "5" and the revised Manual can be brought into use at the beginning of years ending in "8". The purpose of the change is to allow countries to familiarize themselves with the List before using it for mortality studies in relation to population figures from censuses, which in many countries are undertaken in years ending in "0" or "5". The Seventh Revision accordingly took place in 1955 and, since the previous List had been in use for a shorter period than usual, it was limited to essential changes.

For most causes of death, therefore, statistics compiled according to the Seventh Revision should be comparable with those compiled according to the Sixth Revision. For other causes, comparability may have been disturbed by changes in the International Classification itself or in the international rules for selection of cause of death, or in coding practice in the General Register Office. In order to evaluate these changes, deaths registered in the second half of 1957 were coded according to both the old and the new principles, and the results of this dual coding are presented in the Appendix Tables 2, 3, and 4 (pages 232-290).\*

The ratio of Seventh Revision frequencies to Sixth Revision frequencies for persons, all ages, was calculated for each cause of death, and these ratios were used to estimate the numbers of deaths in each year 1949 to 1957 for Table 7 of Part I for 1958, the first year for which all deaths have been classified according to the new list. Similar ratios were calculated for children under 1 year of age for those causes distinguished in Table 11 of that publication. Causes where the Seventh Revision frequencies were within 2 per cent of the Sixth Revision frequencies, or where with numerically small causes there was a small absolute difference in the frequencies, were regarded as comparable. For causes where the difference was greater than 2 per cent, the ratios were used in one of two ways to correct the frequencies for 1949 to 1957:

1. Where there was a clear-cut transfer of deaths from one cause,  $x$ , to another cause,  $y$ , the proportion of  $x$  transferred to  $y$  during the period of dual coding was also transferred for the previous years. In other words, the ratio (comparability factor) was applied to cause  $x$ , the balance of  $x$  being added to cause  $y$ .
2. Where there was a more complex transfer of deaths between a group of causes, and the sum of the group was the same according to both methods of classification during the period of dual coding, the comparability factors were applied to each cause, and the frequencies thus calculated in each year were adjusted to sum to the total of the group on the old classification.

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\* Table 2 shows causes where the numbers of deaths differ between the Sixth and Seventh Revisions; Table 3 shows causes where the numbers do not differ; and Table 4 shows causes for which no deaths were recorded in the period.

## APPENDIX B—continued

Other methods, not involving comparability factors, were used for a small number of causes. Appendix Table 1, below, lists the causes where comparability has been affected by changes in classification, gives details of these changes, and describes the method used to estimate the numbers of deaths in the years 1949 to 1957. Causes which have been affected by a change in General Register Office coding practice, as distinct from a change in the International Classification, have been marked with an asterisk.

**Table 1. Principal changes resulting from the Seventh (1955) Revision of the International Classification of Diseases, and methods used to estimate numbers of deaths in years 1949 to 1957, England and Wales**

Category and change	Comparability factor (CF) or other method
<i>A. Causes affected in Table 7, Statistical Review, Part I.</i>	
022 Aneurysm of aorta .. .. . Aneurysm of abdominal aorta, not specified as syphilitic, now assigned to 451 "Aortic aneurysm, non-syphilitic". See also 023.	CF 0.79
023 Other cardiovascular syphilis .. .. . Now assigned to 022 if aneurysm of aorta is also mentioned.	CF 0.82
040 Typhoid fever .. .. . 041 Paratyphoid fever .. .. . 050 Scarlet fever .. .. . 055 Diphtheria .. .. . 056 Whooping cough .. .. . 084 Smallpox .. .. . 085 Measles .. .. . 086 Rubella (German measles) .. .. . 102 Brill's disease, not specified as louse- or flea-borne .. .. . Now assigned elsewhere when interval between onset and death is 1 year or more.	These deaths have been distinguished as "late effects" in footnotes to Table 7, and have been deducted for 1949-1957. They will, however, continue to appear in footnotes.
053* Septicaemia and pyaemia .. .. . Now assigned to 768 "Other sepsis of newborn" at ages under 4 weeks.	Deaths at under 4 weeks deducted.
155 Malignant neoplasm of biliary passages and of liver (stated to be primary site) .. .. . Malignant neoplasm of liver now assigned to 156 unless specified as primary (previously assigned to 155 if it could be assumed to be primary).	CF 0.94
156 Malignant neoplasm of liver (secondary and unspecified) .. .. . See 155.	Balance of 155 added.
162 Malignant neoplasm of bronchus and trachea, and of lung specified as primary .. .. . Malignant neoplasm of lung now assigned to 163 unless specified as primary (previously assigned to 162 if it could be assumed to be primary).	CF 0.89 Because of a change in coding practice in 1954 this method can be used only for 1955-1957. For previous years only the total of 162 + 163 is shown.
163 Malignant neoplasm of lung, unspecified as to whether primary or secondary .. .. . See 162.	Balance of 162 added (1955-1957 only).

# APPENDIX B—continued

Table 1—continued

Category and change	Comparability factor (CF) or other method	
199 Malignant neoplasm of other and unspecified sites .. Now includes malignant neoplasm of more than one site with no indication as to which was the primary (previously assigned to the first mentioned site).	CF	1.27
	Figures for other sites of malignant neoplasm ad- justed so that total of malignant neoplasms is unaltered. The adjustment nowhere exceeded 0.5 per cent.	
204.0 Lymphatic leukaemia .. .. . Now assigned to 204.3 if specified as acute.	CF	0.64
204.1 Myeloid leukaemia .. .. . Now assigned to 204.3 if specified as acute.	CF	0.55
204.3 Acute leukaemia .. .. . See 204.0 and 204.1.	Balance of 204.0 and 204.1 added.	
241 Asthma .. .. . Now assigned to 500-502 "Bronchitis" if bronchitis is mentioned and the asthma is not indicated as allergic.	CF	0.71
298 Diseases of spleen .. .. . Now includes portal hypertension (previously assigned to 447 "Other hypertensive disease").	CF	1.44
340.1 Pneumococcal meningitis .. .. . "Meningitis due to pneumonia" now assigned to 490-493 "Pneumonia".	CF	0.80
351 Cerebral spastic infantile paralysis .. .. . Now includes residuals of birth injury at ages 4 weeks +, instead of 1 year + (previously assigned to 760 "Intracranial and spinal injury at birth"). See also 352.	CF	1.12
352 Other cerebral paralysis .. .. . Now includes spastic types of paralysis not infantile or congenital (previously assigned to 351).	CF	1.03
420.0 Arteriosclerotic heart disease so described .. .. . Now excludes this condition when reported as due to other heart conditions or hypertension.	CF	0.98
420.1 Heart disease specified as involving coronary arteries .. Now includes these conditions with mention of functional disease of heart.	CF	1.02
420.2 Angina pectoris without mention of coronary disease .. Now excludes these conditions when reported as due to certain heart conditions.	CF	0.96
421 Chronic endocarditis not specified as rheumatic .. .. .  Now includes these conditions when reported as due to arteriosclerosis or hypertension.	CF	421.0 1.12 421.1 1.02 421.4 1.05



# APPENDIX B—continued

Table 1—continued

Category and change	Comparability factor (CF) or other method	
422 Other myocardial degeneration .. .. .  Now assigned to 433 if functional disease of heart is also mentioned.	CF 422.0 0.94 422.1 0.98 422.2 0.91	
433 Functional disease of heart .. .. . Now includes these conditions with mention of myocardial degeneration or arteriosclerosis, but excludes them with mention of coronary disease or hypertension.	CF	2.12
434 Other and unspecified diseases of heart .. .. . “Cardiac ischaemia” now assigned to 420.1 “Heart disease specified as involving coronary arteries”.	CF	0.95
441 Essential malignant hypertensive heart disease .. .. . Now includes conditions in 442 if described as malignant (previously assigned to 442).	CF	1.15
442 Hypertensive heart disease with arteriolar nephrosclerosis. . See 441.	CF	0.96
443 Other and unspecified hypertensive heart disease .. .. . Now includes functional disease of heart with hypertension.	CF	1.03
444 Essential benign hypertension .. .. . Now includes these conditions with mention of arteriosclerosis (previously assigned to 447).	CF	1.34
445 Essential malignant hypertension .. .. . Now includes these conditions with mention of cerebral vascular lesions (previously assigned to 330-332, 334) and nephritis (previously assigned to 590-594). Also includes conditions in 446 if described as malignant (previously assigned to 446).	CF	2.05
446 Hypertension with arteriolar nephrosclerosis .. .. . See 445.	CF	0.97
447 Other hypertensive disease without mention of heart .. Hypertension with arteriosclerosis now assigned to 444.	CF	0.002
450.0 General arteriosclerosis without mention of gangrene .. Now assigned to 433 if functional disease of heart is mentioned. “Aneurysm due to arteriosclerosis” now assigned to 452.	CF	0.90
451 Aortic aneurysm, non-syphilitic, and dissecting aneurysm. . Now includes aneurysm of abdominal aorta unless specified as syphilitic (previously assigned to 022).	CF	1.23
452 Other aneurysm, except of heart and aorta .. .. . Now includes these conditions when reported as due to arteriosclerosis (previously assigned to 450.0).	CF	1.56
490-493 Pneumonia .. .. .  Now includes “meningitis due to pneumonia” (previously assigned to 340.1 “pneumococcal meningitis”).	Balance of 340.1 distributed over the four categories, increasing them by about 0.25 per cent.	

# APPENDIX B—continued

Table 1—continued

Category and change	Comparability factor (CF) or other method
500-502 Bronchitis .. .. .  Now includes these conditions with mention of asthma not indicated as allergic but excludes them with mention of bronchiectasis.	Difference between the sums of 241 + 526 on old and new classifications distributed over the three categories, increasing them by about 0.5 per cent for males and 2 per cent for females.
517 Other diseases of upper respiratory tract .. .. . "Ludwig's angina" now assigned to 538 "Other diseases of buccal cavity".	CF 0.74
526 Bronchiectasis .. .. . Now includes these conditions with mention of bronchitis.	CF 1.30
538 Other diseases of buccal cavity .. .. . See 517.	Balance of 517 added.
572.1 Diverticulitis .. .. . Now includes "ruptured diverticulum" (previously assigned to 578).	Balance of 578 added.
578 Other diseases of intestines and peritoneum .. .. . See 572.1.	CF 0.90
592 Chronic nephritis .. .. . Now assigned to 445 if malignant hypertension is also mentioned.	CF 0.97
593 Nephritis not specified as acute or chronic .. .. . Now assigned to 445 if malignant hypertension is also mentioned.	CF 0.85
640-689 Maternal conditions .. .. .  Now assigned elsewhere when interval between onset and death is 1 year or more.	These deaths have been distinguished as "late effects" in footnotes to Table 7, and have been deducted for 1949-1957. They will, however, continue to appear in footnotes.
751* Spina bifida and meningocele .. .. . No longer includes joint mention of these conditions and congenital hydrocephalus in 752.	CF 0.79
752* Congenital hydrocephalus .. .. . See 751.	Balance of 751 added.
760 Intracranial and spinal injury at birth .. .. . Residuals of birth injury at ages 4 weeks +, instead of 1 year +, now assigned to 351 "Cerebral spastic infantile paralysis".	CF 0.97
762 Postnatal asphyxia and atelectasis .. .. . "Hyaline membrane" now assigned to 773.	CF 0.96

# APPENDIX B—continued

Table 1—continued

Category and change	Comparability factor (CF) or other method
768* Other sepsis of newborn .. .. . Now includes septicaemia and pyaemia at ages under 4 weeks (previously assigned to 053 "Septicaemia and pyaemia").	Deaths assigned to 053 at under 4 weeks added.
773 Ill-defined diseases peculiar to early infancy .. .. See 762.	Balance of 762 added.
782.4* Acute heart failure, undefined .. .. . Now includes "myocardial failure" at ages 65 + (previously assigned to 422.2 "Other myocardial degeneration").	CF 2.76
794* Senility without mention of psychosis .. .. . Now includes "myocardial failure due to senility" (previously assigned to 422.2 "Other myocardial degeneration").	CF 1.08
<i>B. Causes affected in Table 10, Statistical Review, Part I. (Ages under 1 year.)</i>	
Rem. of 001-138* Other infective and parasitic diseases .. Septicaemia and pyaemia now assigned to 768 "Other sepsis of newborn" at ages under 4 weeks (previously assigned to 053 "Septicaemia and pyaemia").	Deaths assigned to 053 at under 4 weeks deducted.
751* Spina bifida and meningocele .. .. . No longer includes joint mention of these conditions and congenital hydrocephalus in 752.	CF 0.79
752* Congenital hydrocephalus .. .. . See 751.	Balance of 751 added.
760, 761 Injury at birth .. .. . Residuals of birth injury at ages 4 weeks +, instead of 1 year +, now assigned to 351 "Cerebral spastic infantile paralysis".	CF 0.98
762 Postnatal asphyxia and atelectasis .. .. . "Hyaline membrane" now assigned to 773 "Ill-defined diseases peculiar to early infancy".	CF 0.96
766-768* Pemphigus and sepsis of newborn .. .. . See remainder of 001-138.	Deaths assigned to 053 at under 4 weeks added.



# APPENDIX B—continued

**Table 2. Causes of death by sex and age according to the Sixth (1948) and Seventh (1955) Revisions, July-December 1957, England and Wales**

Note. Only causes are shown where the numbers of deaths differ between the Sixth and Seventh Revisions. Certain 4th-digit sub-divisions of general interest are shown.

Causes of death	All Causes		I				TUBERCULOSIS							
			001-138				001-019				001-008			
			Infective and Parasitic Diseases				All forms				Respiratory system			
			M		F		M		F		M		F	
Ages at death	Males	Females	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	136440	125751	2617	2530	1329	1280	1721	1713	705	703	1607	1602	571	571
0- ..	4694	3496	58	52	54	48	3	3	4	4	—	—	2	2
1- ..	719	579	60	60	53	53	7	7	16	16	1	1	2	2
5- ..	452	308	35	34	29	29	4	3	5	5	—	—	1	1
10- ..	470	333	20	19	9	9	5	5	4	4	1	1	—	—
15- ..	746	355	20	20	15	15	6	6	9	9	1	1	3	3
20- ..	875	438	29	29	27	27	13	13	11	11	9	9	8	8
25- ..	866	592	45	44	76	75	15	15	55	55	12	12	50	50
30- ..	1045	831	82	82	90	88	46	46	66	65	44	44	64	64
35- ..	1551	1318	95	95	100	99	66	66	82	82	60	60	71	71
40- ..	2463	1887	137	135	88	88	101	100	69	69	89	88	63	63
45- ..	4475	3040	180	181	69	69	135	135	50	50	123	123	44	44
50- ..	7704	4622	233	232	87	85	185	184	52	52	180	180	45	45
55- ..	11822	6492	314	306	92	93	232	230	55	56	221	220	43	44
60- ..	14583	9403	364	351	95	93	274	274	44	44	264	264	30	30
65- ..	18515	13290	357	346	97	92	249	249	42	42	243	243	34	34
70- ..	20549	18519	324	300	123	115	227	225	62	63	216	214	50	51
75- ..	19890	21733	170	158	107	100	101	101	45	44	94	94	36	35
80- ..	15234	20192	63	58	76	68	37	36	25	23	35	34	17	16
85 and over	9787	18323	31	28	42	34	15	15	9	9	14	14	8	8

Causes of death	TUBERCULOSIS											
	001				002				003			
	Respiratory tuberculosis with mention of occupational disease of lung				Pulmonary tuberculosis				Pleural tuberculosis			
	M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	116	116	—	1	1475	1471	563	563	13	12	6	5
0- ..	—	—	—	—	—	—	1	1	—	—	1	1
1- ..	—	—	—	—	1	1	2	2	—	—	—	—
5- ..	—	—	—	—	—	—	1	1	—	—	—	—
10- ..	—	—	—	—	1	1	—	—	—	—	—	—
15- ..	—	—	—	—	1	1	3	3	—	—	—	—
20- ..	—	—	—	—	9	9	8	8	—	—	—	—
25- ..	—	—	—	—	12	12	49	49	—	—	—	—
30- ..	—	—	—	1	43	43	64	63	1	1	—	—
35- ..	1	1	—	—	58	58	71	71	—	—	—	—
40- ..	1	1	—	—	86	85	63	63	1	1	—	—
45- ..	6	6	—	—	117	117	44	44	—	—	—	—
50- ..	18	18	—	—	162	162	44	44	—	—	1	1
55- ..	19	19	—	—	201	201	43	44	1	—	—	—
60- ..	27	28	—	—	236	235	30	30	1	1	—	—
65- ..	22	22	—	—	218	218	31	31	2	2	3	3
70- ..	13	13	—	—	201	199	49	50	2	2	1	1
75- ..	6	6	—	—	85	85	35	35	3	3	1	—
80- ..	3	2	—	—	31	31	17	16	1	1	1	—
85 and over	—	—	—	—	13	13	8	8	1	1	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	TUBERCULOSIS															
	010-019				010				012				012-0			
	Other forms				Meninges and central nervous system				Bones and joints, active or unspecified				Active or unspecified tuberculosis of vertebral column			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	114	111	134	132	21	23	30	33	19	19	25	24	15	15	18	17
0- ..	3	3	2	2	1	2	—	—	—	—	—	—	—	—	—	—
1- ..	6	6	14	14	4	5	11	12	1	1	—	—	1	1	—	—
5- ..	4	3	4	4	4	3	3	3	—	—	—	—	—	—	—	—
10- ..	4	4	4	4	4	4	2	3	—	—	—	—	—	—	—	—
15- ..	5	5	6	6	3	3	2	3	—	—	—	—	—	—	—	—
20- ..	4	4	3	3	1	1	1	1	—	—	—	—	—	—	—	—
25- ..	3	3	5	5	—	—	2	2	—	—	—	—	—	—	—	—
30- ..	2	2	2	1	1	1	—	—	—	—	1	1	—	—	1	1
35- ..	6	6	11	11	—	—	1	1	—	—	2	2	—	—	—	—
40- ..	12	12	6	6	—	—	1	1	1	1	—	—	1	1	—	—
45- ..	12	12	6	6	1	1	1	1	3	3	2	2	1	1	2	2
50- ..	5	4	7	7	—	—	1	1	1	1	1	1	1	1	—	—
55- ..	11	10	12	12	1	1	2	2	1	1	3	3	1	1	2	2
60- ..	10	10	14	14	—	1	—	—	2	2	3	3	2	2	2	2
65- ..	6	6	8	8	—	—	1	1	1	1	2	2	1	1	2	2
70- ..	11	11	12	12	—	—	—	—	6	6	5	5	5	5	5	5
75- ..	7	7	9	9	—	—	—	—	2	2	4	4	2	2	3	3
80- ..	2	2	8	7	1	1	2	2	—	—	2	1	—	—	1	—
85 and over	1	1	1	1	—	—	—	—	1	1	—	—	—	—	—	—

Causes of death	TUBERCULOSIS															
	016				017				018				019			
	Genito-urinary system				Adrenal glands				Other organs				Disseminated tuberculosis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	39	38	26	26	5	4	5	5	5	5	4	3	15	12	22	19
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	2	1	1	1
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	1
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	1	1	2	2	—	—	—	—	—	—	—	—	—	—	2	1
20- ..	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	3	3	1	1	—	—	—	—	—	—	—	—	—	—	1	1
30- ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
35- ..	4	4	5	5	1	1	—	—	1	1	1	1	3	3	3	3
40- ..	6	6	2	2	1	1	—	—	—	—	—	—	—	—	—	—
45- ..	4	4	1	1	—	—	—	—	1	1	—	—	2	2	2	2
50- ..	3	2	2	2	—	—	1	1	1	1	—	—	—	—	2	—
55- ..	5	5	4	4	2	1	—	—	—	—	—	—	—	—	2	—
60- ..	3	3	3	3	1	1	2	2	—	—	—	—	2	1	2	2
65- ..	1	1	2	2	—	—	—	—	1	1	—	—	2	1	2	1
70- ..	4	4	1	1	—	—	1	1	—	—	1	1	1	1	1	1
75- ..	2	2	3	3	—	—	—	—	1	1	—	—	1	1	1	1
80- ..	—	—	—	—	—	—	1	1	—	—	1	1	1	1	1	1
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	TUBERCULOSIS				020-029				022				023			
	019-2				Syphilis and its sequelae				Aneurysm of aorta				Other cardiovascular syphilis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	15	12	21	18	430	358	218	182	231	182	132	103	127	104	43	36
0- .. ..	2	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	1	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	1	—	1	1	—	—	1	1	—	—	—	—	—	—
15- .. ..	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
30- .. ..	—	—	—	—	3	3	1	1	—	—	—	—	2	2	1	1
35- .. ..	—	—	—	—	7	7	3	2	1	2	1	—	1	—	1	1
40- .. ..	3	3	3	3	12	12	4	4	3	3	1	1	6	6	2	2
45- .. ..	2	2	2	2	9	9	3	3	1	2	1	1	7	6	1	1
50- .. ..	—	—	—	—	17	16	12	10	4	3	5	3	8	8	1	1
55- .. ..	—	—	2	2	61	55	17	17	24	24	7	7	28	22	5	5
60- .. ..	2	1	2	2	70	57	24	23	40	31	9	9	21	17	11	10
65- .. ..	2	2	2	2	88	76	34	29	39	33	18	13	25	19	8	8
70- .. ..	1	1	1	1	81	60	36	28	57	40	23	16	16	12	3	2
75- .. ..	1	1	1	1	56	44	41	37	41	29	31	29	9	9	4	2
80- .. ..	1	1	1	1	18	14	24	18	14	11	20	15	3	2	4	3
85 and over	—	—	—	—	7	4	19	10	6	3	16	9	1	1	2	—

Causes of death	025				029				040-049				040			
	General paralysis of insane				Syphilis, unqualified				Infectious diseases commonly arising in intestinal tract				Typhoid fever			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	22	21	11	11	2	3	1	1	32	33	20	19	1	1	3	2
0- .. ..	—	—	—	—	—	—	—	—	4	4	4	4	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
15- .. ..	—	—	—	—	—	—	—	—	3	3	—	—	—	—	—	—
20- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	1	1	—	—
25- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- .. ..	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—
40- .. ..	3	3	—	—	—	—	—	—	3	3	2	2	—	—	—	—
45- .. ..	—	—	—	—	—	—	—	—	3	3	1	1	—	—	1	1
50- .. ..	4	3	3	3	—	—	—	—	3	3	—	—	—	—	—	—
55- .. ..	3	3	2	2	—	—	1	1	5	5	2	2	—	—	1	1
60- .. ..	1	1	1	1	—	—	—	—	2	2	—	—	—	—	—	—
65- .. ..	9	9	1	1	—	—	—	—	4	5	2	2	—	—	—	—
70- .. ..	1	1	2	2	1	2	—	—	1	1	2	2	—	—	—	—
75- .. ..	—	—	1	1	1	1	—	—	1	1	2	1	—	—	1	—
80- .. ..	—	—	—	—	—	—	—	—	—	—	4	4	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	049				050-064				050				053			
	Food poisoning (infection and intoxication)				Other bacterial diseases				Scarlet fever				Septicaemia and pyaemia			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1	2	—	—	111	101	100	92	2	1	5	2	23	17	23	17
0- ..	—	—	—	—	36	30	38	32	—	—	—	—	10	4	7	1
1- ..	—	—	—	—	31	31	21	21	—	—	1	1	3	3	4	4
5- ..	—	—	—	—	7	7	4	4	—	—	1	1	—	—	—	—
10- ..	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	2	2	1	1	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	2	2	—	—	—	—	—	—	1	1	—	—
25- ..	—	—	—	—	1	—	1	1	1	—	—	—	—	—	—	—
30- ..	—	—	—	—	4	4	3	2	—	—	1	—	1	1	1	1
35- ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	1	1
40- ..	—	—	—	—	1	—	2	2	—	—	—	—	—	—	—	—
45- ..	—	—	—	—	5	5	2	2	—	—	—	—	2	2	1	1
50- ..	—	—	—	—	2	2	3	3	—	—	—	—	1	1	—	—
55- ..	—	—	—	—	3	3	2	2	—	—	—	—	1	1	—	—
60- ..	—	—	—	—	5	5	5	4	—	—	1	—	1	1	2	2
65- ..	1	2	—	—	3	3	5	5	—	—	—	—	1	1	1	1
70- ..	—	—	—	—	3	2	5	5	—	—	—	—	—	—	3	3
75- ..	—	—	—	—	2	2	3	2	1	1	1	—	1	1	—	—
80- ..	—	—	—	—	1	1	4	4	—	—	—	—	—	—	3	3
85 and over ..	—	—	—	—	1	1	—	1	—	—	—	—	1	1	—	—

Causes of death	054				056				057				080-096			
	Bacterial toxæmia				Whooping cough				Meningococcal infections				Diseases attributable to viruses			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	—	—	—	1	6	5	11	11	53	51	48	48	266	267	255	253
0- ..	—	—	—	—	5	5	10	10	21	21	20	20	15	15	5	5
1- ..	—	—	—	—	—	—	—	—	23	23	16	16	20	20	15	15
5- ..	—	—	—	—	—	—	1	1	3	3	2	2	24	24	18	18
10- ..	—	—	—	—	—	—	—	—	1	—	—	—	11	11	5	5
15- ..	—	—	—	—	—	—	—	—	1	1	1	1	8	8	5	5
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	12	12	16	16
25- ..	—	—	—	—	—	—	—	—	—	—	1	1	28	28	20	19
30- ..	—	—	—	—	—	—	—	—	—	—	1	1	29	29	18	18
35- ..	—	—	—	—	—	—	—	—	—	—	—	—	19	19	13	13
40- ..	—	—	—	—	1	—	—	—	—	—	—	—	13	13	9	9
45- ..	—	—	—	—	—	—	—	—	1	1	—	—	20	20	10	10
50- ..	—	—	—	—	—	—	—	—	—	—	1	1	15	16	16	16
55- ..	—	—	—	—	—	—	—	—	1	1	1	1	9	9	13	13
60- ..	—	—	—	—	—	—	—	—	1	1	—	—	9	9	18	18
65- ..	—	—	—	—	—	—	—	—	—	—	4	4	6	6	11	11
70- ..	—	—	—	—	—	—	—	—	1	—	—	—	7	7	15	14
75- ..	—	—	—	—	—	—	—	—	—	—	1	1	7	7	16	16
80- ..	—	—	—	—	—	—	—	—	—	—	—	—	6	6	18	18
85 and over ..	—	—	—	1	—	—	—	—	—	—	—	—	8	8	14	14

## APPENDIX B—continued

Table 2—continued

Causes of death	081 Late effects of acute poliomyelitis				082 Acute infectious encephalitis				083 Late effects of acute infectious encephalitis				088 Herpes zoster			
	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	10	9	2	2	31	32	25	25	21	22	22	22	14	14	33	32
0- ..	—	—	—	—	6	6	2	2	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	5	5	5	5	—	—	—	—	—	—	—	—
5- ..	1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—
10- ..	1	1	—	—	2	2	1	1	—	—	—	—	—	—	—	—
15- ..	1	1	—	—	2	2	2	2	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—
30- ..	3	3	2	2	2	2	3	3	—	—	—	—	—	—	—	—
35- ..	1	1	—	—	2	2	1	1	2	2	1	1	—	—	—	—
40- ..	—	—	—	—	2	2	—	—	2	2	3	3	—	—	—	—
45- ..	1	1	—	—	3	3	2	2	4	4	4	4	—	—	—	—
50- ..	—	—	—	—	2	3	1	1	5	5	3	3	1	1	—	—
55- ..	—	—	—	—	2	2	2	2	2	2	3	3	—	—	—	—
60- ..	1	1	—	—	—	—	2	2	4	4	5	5	—	—	—	—
65- ..	1	—	—	—	—	—	1	1	1	2	2	2	—	—	1	1
70- ..	—	—	—	—	1	1	—	—	—	—	1	1	—	—	2	2
75- ..	—	—	—	—	—	—	—	—	1	1	—	—	2	2	5	5
80- ..	—	—	—	—	—	—	—	—	—	—	—	—	4	4	14	14
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	7	7	11	11

Causes of death	092 Infectious hepatitis				120-138 Other infective and parasitic diseases				123 Schistosomiasis				NEOPLASMS II 140-239 Neoplasms			
	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	63	63	89	88	42	43	28	28	—	1	—	—	26304	26293	23030	23025
0- ..	5	5	—	—	—	—	3	3	—	—	—	—	25	25	24	23
1- ..	2	2	2	2	1	1	1	1	—	—	—	—	95	94	57	57
5- ..	4	4	2	2	—	—	1	1	—	—	—	—	63	63	43	43
10- ..	2	2	1	1	—	—	—	—	—	—	—	—	62	62	43	43
15- ..	1	1	1	1	1	1	—	—	—	—	—	—	74	74	38	38
20- ..	1	1	5	5	1	1	—	—	—	—	—	—	79	79	51	52
25- ..	2	2	4	3	1	1	—	—	—	—	—	—	130	130	81	81
30- ..	2	2	3	3	—	—	1	1	—	—	—	—	184	184	207	207
35- ..	3	3	3	3	3	3	1	1	—	—	—	—	303	303	435	435
40- ..	2	2	3	3	3	3	2	2	—	—	—	—	574	574	748	748
45- ..	8	8	4	4	5	6	3	3	—	1	—	—	1257	1256	1302	1302
50- ..	7	7	9	9	9	9	4	4	—	—	—	—	2137	2136	1780	1780
55- ..	5	5	8	8	2	2	3	3	—	—	—	—	3336	3335	2277	2276
60- ..	4	4	11	11	2	2	4	4	—	—	—	—	3723	3723	2823	2822
65- ..	3	3	7	7	6	6	2	2	—	—	—	—	4114	4115	3081	3082
70- ..	6	6	10	10	4	4	3	3	—	—	—	—	4089	4088	3336	3334
75- ..	3	3	10	10	3	3	—	—	—	—	—	—	3292	3287	3181	3176
80- ..	2	2	3	3	1	1	—	—	—	—	—	—	1949	1946	2260	2264
85 and over	1	1	3	3	—	—	—	—	—	—	—	—	818	819	1263	1262

# APPENDIX B—continued

Table 2—continued

Causes of death	NEOPLASMS															
	140-205 Malignant neoplasms including neoplasms of lymphatic and haematopoietic tissues				140-148 Malignant neoplasm of buccal cavity and pharynx				140 Lip				141 Tongue			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	25896	25884	22565	22561	641	622	343	334	41	37	5	5	170	170	82	86
0- ..	12	12	15	15	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	85	85	50	50	1	1	1	1	—	—	—	—	—	—	—	—
5- ..	57	56	40	40	1	1	—	—	—	—	—	—	—	—	—	—
10- ..	55	55	37	37	1	1	—	—	—	—	—	—	—	—	—	—
15- ..	70	70	32	32	1	1	—	—	—	—	—	—	—	—	—	—
20- ..	74	74	44	45	1	1	—	—	—	—	—	—	—	—	—	—
25- ..	121	121	71	71	—	—	1	1	—	—	—	—	—	—	—	—
30- ..	168	168	195	195	2	2	2	2	—	—	—	—	—	—	1	1
35- ..	293	292	415	415	3	2	2	2	—	—	—	—	1	1	—	—
40- ..	550	550	712	712	8	9	8	8	—	—	—	—	—	—	3	3
45- ..	1213	1211	1256	1256	15	15	16	15	—	—	—	—	3	3	6	5
50- ..	2088	2087	1735	1736	30	27	25	24	—	—	—	—	5	4	3	3
55- ..	3279	3278	2218	2217	46	46	33	33	2	2	—	—	11	11	6	6
60- ..	3689	3689	2773	2772	58	55	40	39	5	4	—	—	18	19	5	5
65- ..	4081	4082	3027	3028	105	102	51	49	3	3	—	—	26	26	13	13
70- ..	4058	4057	3287	3284	123	119	45	44	12	10	—	—	35	35	16	15
75- ..	3270	3265	3157	3152	108	105	52	51	6	5	1	1	35	35	18	18
80- ..	1933	1930	2249	2253	95	93	41	39	10	10	3	3	31	31	7	7
85 and over	800	802	1252	1251	43	42	26	26	3	3	1	1	5	5	10	10

Causes of death	NEOPLASMS															
	142 Salivary gland				144 Other parts of mouth and mouth unspecified				145 Oral mesopharynx				147 Hypopharynx			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	44	43	28	28	95	88	43	40	76	73	30	27	42	41	70	70
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- ..	—	—	1	1	—	—	—	—	1	1	—	—	1	—	1	1
40- ..	1	1	2	2	1	1	—	—	1	1	—	—	1	1	3	3
45- ..	2	2	—	2	3	3	—	—	8	8	—	—	3	3	6	6
50- ..	1	1	2	—	3	3	2	2	6	6	2	1	2	2	12	12
55- ..	6	6	2	2	6	6	4	4	9	7	3	3	3	3	8	8
60- ..	3	3	4	4	7	6	8	7	9	7	3	3	5	5	9	9
65- ..	7	7	4	4	19	16	3	3	5	5	6	5	12	12	14	14
70- ..	4	4	2	2	12	11	3	3	12	12	3	3	10	10	5	5
75- ..	9	9	3	3	15	15	9	8	15	14	6	6	2	2	6	6
80- ..	7	7	4	4	17	15	10	9	11	11	6	5	3	3	5	5
85 and over	4	3	4	4	12	12	3	3	7	7	1	1	—	—	1	1



# APPENDIX B—continued

Table 2—continued

Causes of death		NEOPLASMS															
		148				150-159				150				151			
		Pharynx, unspecified				Malignant neoplasm of digestive organs and peritoneum				Oesophagus				Stomach			
Ages at death		M		F		M		F		M		F		M		F	
		6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages	..	105	102	50	49	9969	9911	9210	9151	642	630	469	468	4132	4121	3088	3071
0-	.. ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
1-	.. ..	1	1	—	—	1	1	1	1	—	—	—	—	—	—	—	—
5-	.. ..	—	—	—	—	1	—	1	1	—	—	—	—	—	—	—	—
10-	.. ..	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—
15-	.. ..	—	—	—	—	6	6	2	2	—	—	—	—	1	1	1	1
20-	.. ..	—	—	—	—	4	4	6	6	—	—	—	—	1	1	—	—
25-	.. ..	—	—	—	—	27	27	10	10	—	—	—	—	8	8	3	3
30-	.. ..	1	1	1	1	47	46	33	33	2	1	1	1	22	22	12	12
35-	.. ..	—	—	—	—	83	83	73	72	5	5	—	—	28	28	24	24
40-	.. ..	3	4	—	—	182	181	148	146	6	6	7	7	78	78	48	47
45-	.. ..	1	1	2	2	397	395	274	269	32	32	15	15	172	172	78	76
50-	.. ..	5	3	4	4	666	663	425	419	35	34	26	26	331	329	121	120
55-	.. ..	6	6	6	6	1071	1065	688	682	64	62	27	27	494	492	223	222
60-	.. ..	8	8	7	7	1246	1236	1007	1003	62	59	53	54	564	562	312	311
65-	.. ..	23	23	5	4	1569	1562	1283	1272	103	102	68	66	677	676	451	448
70-	.. ..	21	20	11	11	1732	1721	1601	1588	126	125	72	73	706	704	561	558
75-	.. ..	18	17	6	6	1564	1557	1639	1627	111	110	74	74	597	595	587	583
80-	.. ..	10	10	5	5	980	972	1293	1296	67	65	86	85	328	327	434	434
85 and over		8	8	3	3	392	391	724	722	29	29	40	40	125	126	233	232

Causes of death		NEOPLASMS															
		152				153				154				155			
		Small intestine including duodenum				Large intestine except rectum				Rectum				Biliary passages and of liver (stated to be primary site)			
Ages at death		M		F		M		F		M		F		M		F	
		6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages	..	48	47	33	34	1954	1945	2727	2713	1600	1584	1229	1221	285	265	427	405
0-	.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1-	.. ..	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
5-	.. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
10-	.. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
15-	.. ..	—	—	—	—	1	1	—	—	3	3	—	—	—	—	—	—
20-	.. ..	1	1	—	—	1	1	2	2	—	—	—	—	—	—	1	1
25-	.. ..	—	—	—	—	6	6	3	3	7	7	2	2	—	—	—	—
30-	.. ..	—	—	1	1	8	8	7	7	9	9	3	3	2	2	2	2
35-	.. ..	1	1	1	1	20	20	17	16	13	13	14	14	3	3	2	2
40-	.. ..	1	1	1	1	39	38	42	41	18	18	19	19	8	8	8	6
45-	.. ..	4	3	2	2	53	52	84	83	61	61	38	39	15	13	16	12
50-	.. ..	4	4	5	5	113	112	126	127	72	73	62	60	18	18	16	12
55-	.. ..	10	10	5	5	165	163	216	213	130	130	85	84	32	31	32	29
60-	.. ..	6	6	7	7	200	200	300	298	194	192	150	150	56	50	51	48
65-	.. ..	5	5	6	6	279	280	335	332	255	253	179	179	44	39	61	60
70-	.. ..	3	3	1	2	320	318	436	434	304	299	211	206	49	46	90	88
75-	.. ..	6	7	2	2	376	374	493	491	278	275	199	199	41	38	78	76
80-	.. ..	7	6	—	—	253	251	407	407	185	182	169	169	12	12	47	46
85 and over		—	—	2	2	120	121	257	257	71	69	98	97	4	4	22	22

# APPENDIX B—continued

Table 2—continued

Causes of death	NEOPLASMS															
	156				157				158				159			
	Liver (secondary and unspecified)				Pancreas				Peritoneum				Unspecified digestive organs			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	214	229	217	233	992	991	887	883	89	87	119	112	13	12	14	11
0- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	—	—	—	—	1	1	1	1	—	—	—	—
20- .. ..	1	1	—	—	—	—	—	—	—	—	3	3	—	—	—	—
25- .. ..	—	—	—	—	1	1	2	2	5	5	—	—	—	—	—	—
30- .. ..	—	—	2	2	3	3	2	2	1	1	3	3	—	—	—	—
35- .. ..	3	3	6	6	6	6	8	8	4	4	1	1	—	—	—	—
40- .. ..	9	9	3	5	20	20	19	19	3	3	1	1	—	—	—	—
45- .. ..	7	8	11	13	48	48	18	19	5	6	12	10	—	—	—	—
50- .. ..	9	9	10	13	70	70	46	46	13	13	11	9	1	1	2	1
55- .. ..	31	32	14	17	125	125	73	72	16	16	11	11	4	4	2	2
60- .. ..	26	30	28	29	129	128	93	93	9	9	13	13	—	—	—	—
65- .. ..	32	36	30	30	164	163	129	129	8	7	22	20	2	1	2	2
70- .. ..	38	40	39	41	175	176	170	168	10	9	18	17	1	1	3	1
75- .. ..	25	28	37	39	121	121	151	145	6	6	14	14	3	3	4	4
80- .. ..	26	26	23	24	97	97	121	125	4	5	6	6	1	1	—	—
85 and over	7	7	14	14	33	33	54	54	2	1	3	3	1	1	1	1

Causes of death	NEOPLASMS															
	160-165				160				161				162			
	Malignant neoplasm of respiratory system				Nose, nasal cavities, middle ear, and accessory sinuses				Larynx				Bronchus and trachea, and of lung specified as primary			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	9039	9034	1600	1599	55	55	46	47	340	337	85	84	6256	5612	1038	901
0- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	1	1	1	1	—	—	—	—	—	—	—	—	1	—	1	1
20- .. ..	7	7	4	3	—	—	1	1	1	1	—	—	5	5	2	—
25- .. ..	10	10	6	6	—	—	—	—	1	1	—	—	8	8	4	4
30- .. ..	19	19	14	14	—	—	1	1	—	—	—	—	14	10	11	11
35- .. ..	92	91	36	36	2	1	3	3	1	1	2	2	74	65	15	11
40- .. ..	197	195	46	46	2	2	—	—	4	3	2	2	157	136	34	31
45- .. ..	515	514	94	94	2	2	4	4	9	9	2	2	380	331	67	56
50- .. ..	1018	1019	135	134	2	3	—	—	23	23	7	7	741	658	98	86
55- .. ..	1586	1585	200	199	8	8	2	2	38	38	9	9	1149	1011	144	123
60- .. ..	1730	1731	236	234	6	6	4	4	42	42	11	10	1206	1079	160	134
65- .. ..	1592	1592	232	236	8	7	7	8	54	55	12	12	1091	998	157	134
70- .. ..	1257	1257	238	238	9	10	10	10	57	56	14	14	834	764	142	125
75- .. ..	658	657	197	197	6	6	9	9	60	58	11	11	396	360	110	101
80- .. ..	270	271	115	115	7	8	3	3	37	37	12	12	158	148	66	58
85 and over	84	83	46	46	3	2	2	2	13	13	3	3	42	39	27	26

**APPENDIX B—continued**

**Table 2—continued**

Causes of death	NEOPLASMS															
	163				170-181				170				171		172	
	Lung, unspecified as to whether primary or secondary				Breast and genito-urinary organs				Breast				Cervix uteri		Corpus uteri	
Ages at death	M		F		M		F		M		F		F		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	2349	2991	395	531	3412	3390	8868	8822	26	27	4435	4420	1291	1278	652	650
0- .. ..	—	—	—	—	—	—	1	1	—	—	1	1	—	—	—	—
1- .. ..	1	—	—	—	12	10	5	5	—	—	—	—	—	—	—	—
5- .. ..	1	1	—	—	4	4	4	4	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	1	1	2	2	—	—	—	—	—	—	—	—
15- .. ..	—	1	—	—	6	6	1	1	—	—	—	—	—	—	—	—
20- .. ..	1	1	—	2	13	12	8	9	—	—	3	3	1	1	1	1
25- .. ..	1	1	2	2	10	10	15	15	—	—	6	6	3	3	1	1
30- .. ..	5	9	1	1	20	20	93	92	—	—	39	39	31	30	—	—
35- .. ..	14	23	13	17	28	28	231	231	1	1	118	118	67	67	1	1
40- .. ..	34	54	7	10	31	31	407	404	—	—	228	227	97	96	6	6
45- .. ..	123	172	18	30	69	67	717	713	—	—	387	385	111	111	27	27
50- .. ..	247	330	24	34	115	115	929	926	—	—	487	487	152	152	48	48
55- .. ..	388	525	44	63	219	215	1058	1050	2	2	514	512	146	143	90	90
60- .. ..	464	592	59	84	344	344	1179	1175	4	4	559	558	179	176	112	112
65- .. ..	434	527	54	80	506	506	1142	1137	10	11	552	552	151	150	105	104
70- .. ..	354	424	67	84	668	664	1093	1084	2	2	518	516	154	149	94	94
75- .. ..	193	229	64	73	706	699	988	982	6	6	484	479	116	117	93	93
80- .. ..	64	74	30	38	447	445	639	636	—	—	330	328	56	56	56	55
85 and over	25	28	12	13	213	213	356	355	1	1	209	209	27	27	18	18

Causes of death	NEOPLASMS															
	174		175		176		177		178		179		180			
	Uterus unspecified		Ovary, Fallopian tube, and broad ligament		Other and unspecified female genital organs		Prostate		Testis		Other and unspecified male genital organs		Kidney			
Ages at death	F		F		F		M		M		M		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	99	97	1443	1438	269	263	1783	1777	96	95	65	66	384	378	216	214
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	11	9	4	4
5- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	4	4	3	3
10- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	2	2
15- .. ..	—	—	1	1	—	—	1	1	5	5	—	—	—	—	—	—
20- .. ..	—	—	2	3	—	—	—	—	10	10	—	—	—	—	—	—
25- .. ..	—	—	4	4	—	—	—	—	9	9	—	—	—	—	—	—
30- .. ..	—	—	16	16	1	1	1	1	10	10	—	—	7	7	2	2
35- .. ..	1	1	42	42	2	2	—	—	16	16	1	1	4	4	—	—
40- .. ..	1	1	61	60	6	6	2	2	7	7	—	—	7	7	3	3
45- .. ..	6	6	158	158	12	10	2	2	7	7	1	1	26	25	6	6
50- .. ..	9	9	198	196	10	9	16	16	4	4	7	7	43	43	10	10
55- .. ..	9	8	226	226	21	20	50	48	7	6	3	3	53	53	15	15
60- .. ..	21	21	207	207	28	28	129	129	3	3	4	4	67	67	36	36
65- .. ..	10	10	196	195	32	32	260	260	7	7	9	10	64	63	29	29
70- .. ..	13	13	135	134	42	41	411	411	3	3	10	10	45	44	45	44
75- .. ..	14	14	109	108	47	46	461	458	5	5	13	13	33	33	34	34
80- .. ..	7	7	67	67	51	51	301	299	2	2	13	13	15	14	21	21
85 and over	8	7	20	20	17	17	148	149	—	—	4	4	5	5	6	6



## APPENDIX B—continued

Table 2—continued

Causes of death	NEOPLASMS															
	181				190-199				190				191			
	Bladder and other urinary organs				Malignant neoplasm of other and unspecified sites				Malignant melanoma of skin				Other malignant neoplasm of skin			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1058	1047	440	439	1426	1522	1416	1527	67	64	123	121	178	171	128	121
0- .. ..	—	—	—	—	4	4	5	5	—	—	—	—	—	—	—	—
1- .. ..	—	—	1	1	20	23	12	12	—	—	—	—	1	1	—	—
5- .. ..	—	—	—	—	19	19	16	16	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	17	17	13	13	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	22	22	13	13	—	—	1	1	—	—	—	—
20- .. ..	3	2	—	—	18	19	9	10	1	1	3	3	—	—	—	—
25- .. ..	1	1	—	—	24	24	8	8	3	3	3	3	1	1	—	—
30- .. ..	2	2	—	—	36	37	30	31	4	4	5	5	1	1	—	—
35- .. ..	6	6	—	—	42	43	41	42	5	5	9	9	2	2	1	1
40- .. ..	15	15	3	3	62	64	53	58	3	3	10	10	2	2	3	3
45- .. ..	33	32	8	8	118	121	88	99	7	7	9	9	1	1	—	—
50- .. ..	45	45	12	12	138	143	132	144	6	6	14	13	4	2	4	4
55- .. ..	104	103	35	34	209	219	127	141	11	11	8	8	14	14	4	3
60- .. ..	137	137	34	34	143	156	167	176	4	4	10	10	8	7	7	7
65- .. ..	156	155	65	65	158	170	170	186	8	6	9	10	19	20	13	11
70- .. ..	197	194	90	90	139	157	178	197	4	4	17	15	29	27	14	13
75- .. ..	188	184	91	91	120	133	173	187	5	4	10	10	32	32	30	27
80- .. ..	116	117	51	51	90	98	103	109	5	5	12	12	34	33	22	23
85 and over	55	54	50	50	47	53	78	80	1	1	3	3	30	28	30	29

Causes of death	NEOPLASMS															
	192				193				194				195			
	Eye				Brain and other parts of nervous system				Thyroid gland				Other endocrine glands			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	28	29	22	22	470	471	332	333	44	44	130	129	32	32	23	21
0- .. ..	—	—	1	1	2	2	1	1	—	—	—	—	1	1	3	3
1- .. ..	—	—	1	1	14	17	6	6	—	—	—	—	3	3	3	3
5- .. ..	1	1	—	—	13	12	13	13	—	—	—	—	2	3	1	1
10- .. ..	—	—	—	—	7	7	4	4	—	—	—	—	1	1	—	—
15- .. ..	1	2	—	—	10	9	5	5	—	—	—	—	—	—	—	—
20- .. ..	—	—	—	—	7	8	5	5	—	—	—	—	—	—	—	—
25- .. ..	—	—	—	—	10	10	3	3	1	1	—	—	—	—	—	—
30- .. ..	—	—	—	—	20	19	11	11	1	1	—	—	1	2	1	1
35- .. ..	—	—	—	—	29	29	22	22	1	1	—	—	1	—	1	1
40- .. ..	—	—	2	2	30	30	24	24	—	—	1	1	3	3	1	1
45- .. ..	2	2	2	2	66	66	31	31	3	3	2	2	1	1	3	3
50- .. ..	2	2	1	1	69	69	60	60	2	2	9	9	8	7	1	1
55- .. ..	3	3	2	2	85	85	40	40	6	6	10	10	5	5	2	1
60- .. ..	7	7	3	3	49	47	55	55	3	3	19	19	3	3	1	1
65- .. ..	5	5	2	2	33	35	24	24	13	13	20	19	1	1	2	2
70- .. ..	2	2	5	5	19	19	19	20	9	9	24	24	1	1	2	1
75- .. ..	4	4	1	1	5	5	7	7	3	3	24	24	1	1	1	1
80- .. ..	—	—	1	1	2	2	1	1	1	1	13	13	—	—	1	1
85 and over	1	1	1	1	—	—	1	1	1	1	8	8	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	NEOPLASMS															
	196				197				198				199			
	Bone				Connective tissue				Secondary and unspecified malignant neoplasm of lymph nodes				Other and unspecified sites			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	166	168	141	141	68	67	46	46	23	26	8	11	350	450	463	582
0- ..	—	—	—	—	2	—	—	—	—	—	—	—	1	1	—	—
1- ..	—	—	1	1	3	2	—	—	—	—	—	—	—	—	1	1
5- ..	—	—	1	1	3	3	1	1	—	—	—	—	—	—	—	—
10- ..	7	7	9	9	2	2	—	—	—	—	—	—	—	—	—	—
15- ..	8	8	5	5	2	2	—	—	—	—	—	—	1	1	2	2
20- ..	6	6	1	1	2	2	—	—	—	—	—	—	2	2	—	1
25- ..	3	3	—	—	2	2	1	1	—	1	—	—	4	3	1	1
30- ..	4	4	4	4	4	4	3	3	—	—	—	—	1	2	6	7
35- ..	1	2	3	3	—	—	2	2	—	—	—	—	3	4	3	4
40- ..	8	8	2	2	4	4	3	3	—	—	—	—	12	14	7	12
45- ..	7	7	8	8	6	6	3	3	1	1	3	4	24	27	27	37
50- ..	14	14	5	5	3	3	3	3	1	2	—	1	29	36	35	47
55- ..	19	19	8	8	9	8	5	5	3	3	1	1	54	65	47	63
60- ..	11	11	14	14	5	5	9	9	2	2	—	—	51	67	49	58
65- ..	19	19	20	19	7	7	—	—	3	4	—	1	50	60	80	98
70- ..	16	17	22	22	8	8	6	6	5	5	—	—	46	65	69	91
75- ..	18	18	17	17	4	4	7	7	3	3	2	2	45	59	74	91
80- ..	19	18	12	12	2	2	2	2	5	5	2	2	22	32	37	42
85 and over	6	7	9	10	3	3	1	1	—	—	—	—	5	12	25	27

Causes of death	NEOPLASMS															
	200-205				200				203				204			
	Neoplasms of lymphatic and haematopoietic tissues				Lymphosarcoma and reticulosarcoma				Multiple myeloma (plasmocytoma)				Leukaemia and aleukaemia			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1409	1405	1128	1128	258	256	207	205	149	148	174	176	702	701	554	554
0- ..	6	6	9	9	2	2	1	1	—	—	—	—	3	3	8	8
1- ..	50	50	31	31	1	1	3	3	1	1	—	—	47	47	26	26
5- ..	31	31	19	19	2	2	3	3	—	—	—	—	26	26	15	15
10- ..	36	36	20	20	6	6	2	2	—	—	—	—	23	23	16	16
15- ..	34	34	15	15	5	8	2	2	—	—	—	—	18	18	8	8
20- ..	31	31	17	17	8	5	1	1	—	—	—	—	14	14	9	9
25- ..	50	50	31	31	9	9	2	2	—	—	—	—	16	16	17	17
30- ..	44	44	23	23	6	6	3	3	—	—	—	—	20	20	11	11
35- ..	45	45	32	32	5	5	1	1	1	1	2	2	19	19	19	19
40- ..	70	70	50	50	11	11	9	9	6	6	2	2	28	28	24	24
45- ..	99	99	67	66	24	24	10	9	11	11	9	9	41	41	34	34
50- ..	121	120	89	89	32	31	13	12	13	13	15	16	43	43	45	45
55- ..	148	148	112	112	33	33	17	17	20	20	23	23	59	59	49	49
60- ..	168	167	144	145	30	30	28	28	32	31	34	35	74	74	61	61
65- ..	151	150	149	148	33	32	41	40	28	28	32	32	69	69	53	53
70- ..	139	139	132	133	26	26	29	30	17	17	30	30	82	82	58	58
75- ..	114	114	108	108	17	17	23	23	13	13	19	19	73	73	57	57
80- ..	51	51	58	58	5	5	9	9	4	4	6	6	34	34	35	35
85 and over	21	20	22	22	3	3	10	10	3	3	2	2	13	12	9	9

APPENDIX B—continued

Table 2—continued

Causes of death	NEOPLASMS															
	204·0				204·1				204·3				204·4			
	Lymphatic leukaemia				Myeloid leukaemia				Acute leukaemia, unspecified type				Other and unspecified leukaemia			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	273	170	160	107	313	160	284	170	37	294	43	211	22	20	19	18
0- .. ..	1	—	3	1	1	1	3	1	1	2	1	5	—	—	—	—
1- .. ..	30	8	10	2	10	3	9	1	5	34	5	21	1	1	1	1
5- .. ..	21	4	7	2	2	1	4	—	1	19	3	12	1	1	1	1
10- .. ..	11	2	5	1	8	4	8	5	1	14	3	10	—	—	—	—
15- .. ..	4	—	3	—	8	2	2	—	3	14	—	6	1	—	—	—
20- .. ..	3	—	2	1	7	3	5	2	3	10	1	4	—	—	—	—
25- .. ..	1	—	3	—	10	3	10	4	—	8	—	9	—	—	2	2
30- .. ..	4	—	2	—	13	3	4	3	1	15	2	5	—	—	—	—
35- .. ..	4	2	2	—	11	4	11	5	3	12	2	11	—	—	1	—
40- .. ..	4	2	2	1	21	9	17	12	2	16	2	8	—	—	—	—
45- .. ..	16	11	7	5	20	8	18	12	1	18	2	10	2	2	2	2
50- .. ..	10	5	11	9	25	14	26	15	1	18	4	17	2	1	—	—
55- .. ..	18	14	13	6	32	14	25	11	4	26	3	24	2	2	2	2
60- .. ..	24	20	15	13	35	22	31	23	3	20	6	16	3	3	4	4
65- .. ..	28	22	12	11	32	21	33	20	2	19	4	18	4	4	1	1
70- .. ..	35	30	19	17	32	18	33	21	3	22	1	15	5	5	2	2
75- .. ..	30	23	22	19	32	21	28	22	2	20	1	10	—	—	2	2
80- .. ..	22	21	17	14	8	6	14	12	1	4	2	7	1	1	1	1
85 and over	7	6	5	5	6	3	3	1	—	3	1	3	—	—	—	—

Causes of death	NEOPLASMS													
	210-229				211				212				216	
	Benign neoplasms				Other parts of digestive system				Respiratory system				Ovary	
	M		F		M		F		M		F		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	162	163	285	284	5	6	11	11	7	7	4	3	63	62
0- .. ..	6	6	8	7	—	—	—	—	2	2	1	—	—	—
1- .. ..	5	4	6	6	—	—	—	—	—	—	—	—	—	—
5- .. ..	1	2	2	2	1	1	—	—	—	—	—	—	—	—
10- .. ..	1	1	5	5	—	—	—	—	—	—	—	—	—	—
15- .. ..	1	1	3	3	—	—	—	—	—	—	—	—	—	—
20- .. ..	3	3	6	6	—	—	—	—	—	—	—	—	2	1
25- .. ..	5	5	8	8	—	—	1	1	—	—	—	—	—	—
30- .. ..	9	9	6	6	—	—	1	1	—	—	—	—	1	1
35- .. ..	3	4	11	11	—	—	—	—	—	—	—	—	3	3
40- .. ..	6	6	21	21	—	—	—	—	—	—	1	1	5	5
45- .. ..	11	12	27	27	—	1	1	1	1	1	—	—	1	1
50- .. ..	21	21	29	28	1	1	—	—	1	1	—	—	4	4
55- .. ..	15	15	30	29	—	—	1	1	—	—	—	—	1	1
60- .. ..	12	12	30	30	1	1	1	1	—	—	—	—	7	7
65- .. ..	14	14	29	29	—	—	2	2	—	—	1	1	7	7
70- .. ..	15	15	32	34	—	—	3	3	2	2	1	1	13	13
75- .. ..	9	9	15	15	—	—	—	—	1	1	—	—	10	10
80- .. ..	13	13	8	8	2	2	1	1	—	—	—	—	3	3
85 and over	12	11	9	9	—	—	—	—	—	—	—	—	6	6



# APPENDIX B—continued

Table 2—continued

Causes of death		NEOPLASMS															
		219				223				224				225			
		Kidney and other urinary organs				Brain and other parts of nervous system				Endocrine glands				Bone and cartilage			
Ages at death	M		F		M		F		M		F		M		F		
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	
All ages	43	42	17	17	66	66	95	96	19	20	23	25	5	5	3	1	
0- .. ..	—	—	—	—	—	—	3	3	1	1	—	—	—	—	—	—	
1- .. ..	—	—	—	—	2	2	5	5	1	1	—	—	—	—	—	—	
5- .. ..	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	
10- .. ..	—	—	—	—	—	—	2	2	—	—	3	3	—	—	—	—	
15- .. ..	—	—	—	—	—	—	3	3	1	1	—	—	—	—	—	—	
20- .. ..	—	—	—	—	2	2	3	3	—	—	1	2	—	—	—	—	
25- .. ..	—	—	—	—	2	2	3	3	3	3	2	2	—	—	—	—	
30- .. ..	—	—	—	—	7	7	2	2	2	2	1	1	—	—	—	—	
35- .. ..	—	—	—	—	2	2	3	3	—	1	1	1	1	1	—	—	
40- .. ..	—	—	—	—	4	4	5	5	—	—	3	3	1	1	—	—	
45- .. ..	1	1	—	—	7	7	11	11	1	1	1	1	—	—	1	1	
50- .. ..	4	4	1	1	10	10	10	10	1	1	2	2	—	—	1	—	
55- .. ..	1	1	1	1	10	10	19	19	3	3	1	1	1	1	—	—	
60- .. ..	3	3	4	4	6	6	10	10	1	1	4	4	—	—	1	—	
65- .. ..	4	4	—	—	7	7	9	9	2	2	2	2	1	1	—	—	
70- .. ..	5	5	4	4	6	6	4	5	—	—	2	3	—	—	—	—	
75- .. ..	4	4	3	3	1	1	1	1	2	2	—	—	1	1	—	—	
80- .. ..	11	11	3	3	—	—	—	—	—	—	—	—	—	—	—	—	
85 and over	10	9	1	1	—	—	—	—	1	1	—	—	—	—	—	—	

Causes of death		NEOPLASMS															
		227				229				237				239			
		Muscular and connective tissue				Other and unspecified organs and tissues				Unspecified nature of brain and other parts of nervous system				Unspecified nature of other and unspecified organs			
Ages at death		M		F		M		F		M		F		M		F	
		6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages	..	2	3	3	4	2	1	6	5	211	211	153	152	8	8	8	9
0- ..	..	—	—	1	1	—	—	3	3	4	4	1	1	2	2	—	—
1- ..	..	—	—	—	—	1	—	—	—	4	4	1	1	—	—	—	—
5- ..	..	—	1	—	—	—	—	—	—	5	5	1	1	—	—	—	—
10- ..	..	—	—	—	—	—	—	—	—	6	6	1	1	—	—	—	—
15- ..	..	—	—	—	—	—	—	—	—	3	3	3	3	—	—	—	—
20- ..	..	—	—	—	—	—	—	—	—	2	2	1	1	—	—	—	—
25- ..	..	—	—	—	—	—	—	—	—	4	4	2	2	—	—	—	—
30- ..	..	—	—	—	—	—	—	—	—	6	6	6	6	—	—	—	—
35- ..	..	—	—	—	—	—	—	—	—	7	7	9	9	—	—	—	—
40- ..	..	—	—	—	—	—	—	—	—	17	17	15	15	1	1	—	—
45- ..	..	—	—	—	—	—	—	—	—	33	33	18	18	—	—	—	—
50- ..	..	2	2	—	—	—	—	—	—	28	28	12	12	—	—	1	1
55- ..	..	—	—	1	1	—	—	1	—	39	39	27	27	—	—	2	3
60- ..	..	—	—	—	1	—	—	—	—	21	21	18	18	—	—	—	—
65- ..	..	—	—	1	1	—	—	1	1	15	15	24	24	—	—	—	—
70- ..	..	—	—	—	—	—	—	1	1	13	13	9	8	1	1	1	1
75- ..	..	—	—	—	—	—	—	—	—	4	4	4	4	4	4	2	2
80- ..	..	—	—	—	—	—	—	—	—	—	—	1	1	—	—	1	1
85 and over	..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	1

# APPENDIX B—continued

Table 2—continued

Causes of death	III 240-289 Allergic, Endocrine system, Metabolic, and Nutritional Diseases				240-245 Allergic disorders				241 Asthma				250-254 Diseases of thyroid gland			
	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1,260	1,086	2,214	2,067	533	359	592	443	529	355	589	440	46	45	298	298
0-.. ..	19	18	10	11	2	1	—	—	2	1	—	—	2	2	—	—
1-.. ..	5	4	13	13	2	1	7	7	2	1	7	7	—	—	—	—
5-.. ..	11	11	8	8	4	4	3	3	3	3	3	3	—	—	1	1
10-.. ..	3	3	11	10	2	2	4	3	2	2	4	3	—	—	—	—
15-.. ..	5	5	16	15	3	3	8	7	3	3	8	7	—	—	1	1
20-.. ..	18	17	28	27	8	7	16	16	8	7	16	16	—	—	—	—
25-.. ..	18	18	24	22	6	6	10	8	5	5	9	7	2	2	2	2
30-.. ..	16	14	23	22	6	4	10	9	6	4	10	9	1	1	2	2
35-.. ..	28	27	40	35	13	12	24	19	13	12	23	18	1	1	2	2
40-.. ..	39	36	44	41	25	22	24	20	25	22	24	20	2	2	9	9
45-.. ..	67	56	82	72	36	24	46	36	35	23	46	36	2	2	4	4
50-.. ..	92	72	121	116	58	37	56	50	58	37	56	50	3	3	10	10
55-.. ..	123	101	159	147	63	41	66	52	63	41	66	52	6	6	24	24
60-.. ..	162	134	257	235	85	58	80	58	85	58	80	58	8	8	38	38
65-.. ..	199	168	376	351	77	47	75	48	76	46	74	47	8	7	63	63
70-.. ..	160	136	388	357	66	42	71	43	66	42	71	43	7	7	53	53
75-.. ..	164	146	324	303	53	35	54	34	53	35	54	34	3	3	46	46
80-.. ..	100	92	199	196	18	10	23	20	18	10	23	20	1	1	30	30
85 and over	31	28	91	86	6	3	15	10	6	3	15	10	—	—	13	13

Causes of death	252 Thyrototoxicosis with or without goitre				253 Myxoedema and cretinism				254 Other diseases of thyroid gland				260 Diabetes mellitus			
	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	30	29	151	151	11	11	125	126	1	1	4	3	520	519	1,099	1,096
0-.. ..	—	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—
1-.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
5-.. ..	—	—	—	—	—	—	1	1	—	—	—	—	1	1	3	3
10-.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	6
15-.. ..	—	—	—	—	—	—	1	1	—	—	—	—	1	1	5	5
20-.. ..	—	—	—	—	—	—	—	—	—	—	—	—	7	7	10	10
25-.. ..	—	—	2	2	1	1	—	—	—	—	—	—	7	7	6	6
30-.. ..	1	1	—	—	—	—	1	1	—	—	—	—	7	7	4	4
35-.. ..	1	1	2	2	—	—	—	—	—	—	—	—	8	8	11	11
40-.. ..	1	1	7	7	1	1	—	—	—	—	—	—	7	7	2	2
45-.. ..	2	2	4	4	—	—	—	—	—	—	—	—	17	18	21	21
50-.. ..	2	2	8	8	1	1	2	2	—	—	—	—	20	20	38	38
55-.. ..	5	5	14	14	—	—	6	6	—	—	—	—	31	30	45	45
60-.. ..	7	7	22	22	1	1	13	13	—	—	1	1	53	53	111	111
65-.. ..	6	5	34	34	1	1	24	24	—	—	—	—	89	88	199	200
70-.. ..	5	5	27	27	2	2	24	24	—	—	1	1	73	73	236	234
75-.. ..	—	—	21	21	2	2	21	22	1	1	1	—	102	102	205	203
80-.. ..	—	—	5	5	1	1	24	24	—	—	—	—	71	71	138	138
85 and over	—	—	5	5	—	—	8	8	—	—	—	—	25	25	57	57

# APPENDIX B—continued

Table 2—continued

Causes of death	270-277				271				272				274			
	Diseases of other endocrine glands				Diseases of parathyroid gland				Diseases of pituitary gland				Diseases of adrenal glands			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	61	63	84	86	1	1	5	6	23	25	39	39	24	24	26	27
0- ..	10	10	9	9	—	—	—	—	—	—	2	2	7	7	7	7
1- ..	—	—	2	2	—	—	—	—	—	—	—	—	—	—	1	1
5- ..	2	2	—	—	—	—	—	—	—	—	—	—	2	2	—	—
10- ..	1	1	—	1	—	—	—	—	—	—	1	1	1	1	—	—
15- ..	1	1	1	1	—	—	—	—	1	1	—	—	—	—	1	1
20- ..	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—
25- ..	2	2	4	4	—	—	—	—	—	—	1	1	—	—	1	1
30- ..	1	1	1	1	—	—	—	—	—	—	—	—	1	1	1	1
35- ..	1	1	1	1	—	—	—	—	1	1	—	—	—	—	1	1
40- ..	2	2	6	6	—	—	1	1	2	2	4	4	—	—	1	1
45- ..	6	6	6	6	—	—	—	—	5	5	4	4	1	1	—	—
50- ..	4	5	8	9	1	1	—	—	1	2	5	6	1	1	—	1
55- ..	7	8	9	10	—	—	1	2	2	3	4	4	2	2	2	2
60- ..	7	7	14	14	—	—	1	1	3	3	9	9	3	3	2	2
65- ..	12	12	9	10	—	—	1	1	7	7	2	2	2	2	4	5
70- ..	3	3	7	7	—	—	—	—	1	1	5	5	2	2	2	2
75- ..	1	1	3	3	—	—	1	1	—	—	1	1	1	1	1	1
80- ..	1	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—
85 and over	—	—	2	2	—	—	—	—	—	—	—	—	—	—	1	1

Causes of death	280-289				286				287				289			
	Avitaminoses and other metabolic diseases				Other avitaminoses and nutritional deficiency states				Obesity not specified as of endocrine origin				Other metabolic diseases			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	100	100	141	144	19	19	35	36	35	35	67	66	38	38	30	33
0- ..	4	4	1	2	—	—	—	—	—	—	—	—	4	4	1	2
1- ..	3	3	2	2	1	1	1	1	—	—	—	—	2	2	1	1
5- ..	4	4	1	1	—	—	—	—	—	—	—	—	4	4	1	1
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	1	1
20- ..	3	3	1	1	1	1	—	—	—	—	—	—	2	2	1	1
25- ..	1	1	2	2	—	—	1	1	—	—	—	—	1	1	1	1
30- ..	1	1	6	6	—	—	2	2	1	1	1	1	—	—	3	3
35- ..	5	5	2	2	—	—	1	1	2	2	—	—	3	3	1	1
40- ..	3	3	3	4	1	1	—	—	1	1	2	2	1	1	1	2
45- ..	6	6	5	5	2	2	2	2	1	1	3	3	3	3	—	—
50- ..	7	7	9	9	—	—	6	7	4	4	2	2	3	3	1	—
55- ..	16	16	15	16	4	4	1	1	6	6	6	6	5	5	7	8
60- ..	9	8	14	14	3	3	2	2	3	3	8	8	2	1	2	2
65- ..	13	14	30	30	—	—	6	5	7	7	19	19	3	4	2	3
70- ..	11	11	21	20	3	3	7	7	3	3	11	10	3	3	3	3
75- ..	5	5	16	17	2	2	3	4	1	1	8	8	2	2	3	3
80- ..	9	9	8	8	2	2	1	1	6	6	5	5	—	—	1	1
85 and over	—	—	4	4	—	—	2	2	—	—	2	2	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	IV 290-299				290				290·0				291			
	Diseases of the Blood and Blood-forming organs				Pernicious and other hyperchromic anaemias				Pernicious anaemia				Iron deficiency anaemias (hypochromic anaemias)			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	367	376	674	678	126	126	320	318	103	103	288	286	39	40	92	91
0- ..	9	9	4	4	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	4	4	2	2	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	4	4	2	2	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	7	7	4	6	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	7	7	1	1	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	3	3	3	3	—	—	—	—	—	—	—	—	1	1	—	—
25- ..	7	7	5	5	1	1	—	—	—	—	—	—	—	—	1	1
30- ..	3	3	6	6	—	—	—	—	—	—	—	—	—	—	1	1
35- ..	4	6	9	10	—	—	1	1	—	—	1	1	—	—	1	1
40- ..	4	4	13	13	—	—	—	—	—	—	—	—	—	—	1	—
45- ..	8	7	12	12	—	—	1	1	—	—	1	1	2	2	1	1
50- ..	15	16	11	11	1	1	2	2	1	1	2	2	—	—	—	—
55- ..	15	17	38	39	3	3	12	12	2	2	11	11	—	—	4	4
60- ..	38	39	51	51	8	8	17	17	6	6	15	15	1	2	6	6
65- ..	39	41	69	70	12	12	32	32	10	10	29	29	3	3	10	10
70- ..	51	52	105	104	26	26	49	48	22	22	45	44	5	5	16	16
75- ..	63	64	139	139	31	31	82	82	26	26	73	73	7	7	16	16
80- ..	53	53	120	120	24	24	73	73	18	18	65	65	11	11	23	23
85 and over	33	33	80	80	20	20	51	50	18	18	46	45	9	9	12	12

Causes of death	293				294				296				298			
	Anaemia of unspecified type				Polycythaemia				Purpura and other haemorrhagic conditions				Diseases of spleen			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	28	29	60	63	17	17	17	18	32	32	40	39	13	20	14	19
0- ..	—	—	1	1	—	—	—	—	4	4	—	—	—	—	—	—
1- ..	1	1	—	—	—	—	—	—	2	2	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	1	1	1	1	—	—
10- ..	1	1	—	—	—	—	—	—	1	1	1	1	—	—	1	3
15- ..	—	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—
20- ..	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
25- ..	—	—	—	—	1	1	—	—	1	1	2	2	—	—	—	—
30- ..	—	—	2	2	—	—	—	—	1	1	1	1	—	—	1	1
35- ..	—	—	1	1	—	—	1	1	2	2	1	1	1	3	—	1
40- ..	—	—	3	4	—	—	—	—	1	1	4	4	1	1	1	1
45- ..	—	—	—	—	1	1	1	1	2	2	3	3	—	—	1	1
50- ..	1	1	—	—	1	1	—	—	2	2	1	1	1	2	—	—
55- ..	2	2	3	3	1	1	1	1	2	2	2	2	—	1	—	1
60- ..	3	3	5	5	7	7	2	2	6	6	3	3	1	1	3	3
65- ..	2	3	6	7	5	5	5	5	1	1	1	1	4	5	2	2
70- ..	4	4	9	9	—	—	3	3	3	3	6	6	1	1	3	3
75- ..	7	7	16	16	—	—	4	4	3	3	4	4	1	2	1	1
80- ..	5	5	7	7	—	—	—	1	1	1	5	5	1	1	1	1
85 and over	2	2	7	8	—	—	—	—	—	—	4	3	—	—	—	1

# APPENDIX B—continued

Table 2—continued

Causes of death	299				V 300-326				300-309				301			
	Other diseases of blood and blood-forming organs				Mental, Psychoneurotic and Personality Disorders				Psychoses				Manic-depressive reaction			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	5	5	8	7	171	171	297	296	121	119	249	248	3	3	16	15
0- .. ..	3	3	—	—	7	7	9	9	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	8	8	6	6	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	5	5	3	3	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	4	4	—	—	1	1	—	—	—	—	—	—
20- .. ..	—	—	—	—	3	3	2	2	1	1	1	1	—	—	—	—
25- .. ..	—	—	—	—	6	6	3	3	1	1	—	—	—	—	—	—
30- .. ..	—	—	—	—	2	2	1	1	2	2	—	—	—	—	—	—
35- .. ..	—	—	—	—	6	6	6	6	3	3	4	4	—	—	1	1
40- .. ..	—	—	—	—	2	2	3	3	1	1	1	1	—	—	—	—
45- .. ..	—	—	—	—	9	9	7	7	5	5	4	4	1	1	1	1
50- .. ..	1	1	1	1	7	8	11	11	5	5	9	9	1	1	2	2
55- .. ..	—	—	—	—	5	5	25	24	3	3	20	19	—	—	4	3
60- .. ..	—	—	1	1	13	13	21	21	11	11	19	19	1	1	3	3
65- .. ..	1	1	—	—	12	12	22	22	10	10	19	19	—	—	3	3
70- .. ..	—	—	2	2	20	20	39	39	17	16	36	36	—	—	1	1
75- .. ..	—	—	1	1	22	22	49	48	22	22	49	48	—	—	—	—
80- .. ..	—	—	2	1	23	22	37	37	22	21	36	36	—	—	1	1
85 and over	—	—	1	1	17	17	52	53	17	17	51	52	—	—	—	—

Causes of death	304				320-326				322				322·1			
	Senile psychosis				Diseases of character, behaviour, and intelligence				Alcoholism				Chronic			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	77	75	168	168	40	42	33	33	7	9	5	5	5	7	3	3
0- .. ..	—	—	—	—	7	7	9	9	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	8	8	6	6	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	5	5	3	3	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	3	3	—	—	—	—	—	—	—	—	—	—
20- .. ..	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—
25- .. ..	—	—	—	—	4	4	2	2	—	—	—	—	—	—	—	—
30- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
35- .. ..	—	—	—	—	3	3	—	—	2	2	—	—	1	1	—	—
40- .. ..	—	—	—	—	—	—	2	2	—	—	1	1	—	—	1	1
45- .. ..	—	—	—	—	4	4	3	3	3	3	2	2	3	3	2	2
50- .. ..	—	—	—	—	1	2	—	—	1	2	—	—	1	2	—	—
55- .. ..	—	—	—	—	1	1	3	3	—	—	2	2	—	—	—	—
60- .. ..	—	—	2	2	2	2	—	—	1	1	—	—	—	—	—	—
65- .. ..	5	5	9	9	—	—	1	1	—	—	—	—	—	—	—	—
70- .. ..	13	12	31	31	—	1	1	1	—	1	—	—	—	1	—	—
75- .. ..	21	21	43	42	—	—	—	—	—	—	—	—	—	—	—	—
80- .. ..	21	20	33	33	—	—	1	1	—	—	—	—	—	—	—	—
85 and over	17	17	50	51	—	—	—	—	—	—	—	—	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	VI 330-398				330-334				330				331			
	Diseases of the Nervous System and Sense Organs				Vascular lesions affecting central nervous system				Subarachnoid haemorrhage				Cerebral haemorrhage			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	16366	16215	22606	22416	14993	14847	21140	20945	583	576	927	918	5861	5769	8444	8371
0- ..	82	86	57	61	6	6	5	5	4	3	2	2	—	1	2	2
1- ..	53	54	40	41	3	3	2	2	1	1	—	—	2	2	—	—
5- ..	24	25	24	24	2	2	3	3	1	1	2	2	1	1	1	1
10- ..	37	38	25	25	7	7	6	6	6	6	5	5	1	1	1	1
15- ..	35	35	29	29	6	6	4	4	5	5	2	2	1	1	1	1
20- ..	36	35	26	24	11	11	9	7	8	8	4	4	3	3	5	3
25- ..	43	43	38	38	16	16	17	16	12	12	13	13	4	4	2	1
30- ..	67	62	71	68	27	23	31	29	20	19	19	18	6	3	8	7
35- ..	111	106	110	107	60	55	59	56	39	38	33	32	18	14	20	19
40- ..	161	152	183	181	112	104	141	134	40	39	54	54	63	56	69	63
45- ..	324	308	361	342	246	232	292	274	62	62	90	88	135	125	153	141
50- ..	587	559	673	650	491	463	585	562	67	66	111	109	315	292	369	351
55- ..	981	956	1004	981	876	853	892	868	102	101	113	111	485	473	535	521
60- ..	1438	1418	1517	1504	1305	1288	1384	1371	62	61	107	107	707	696	777	773
65- ..	2219	2193	2517	2498	2078	2055	2350	2334	70	70	122	122	910	899	1145	1141
70- ..	2889	2892	3804	3782	2714	2714	3622	3600	36	36	104	102	1062	1060	1529	1526
75- ..	3233	3209	4669	4636	3096	3072	4478	4443	29	29	84	85	1014	1006	1653	1647
80- ..	2555	2552	4215	4202	2474	2472	4084	4071	14	14	44	44	740	739	1322	1321
85 and over	1491	1492	3238	3223	1463	1465	3176	3160	5	5	18	18	394	393	852	852

Causes of death	332				334				340-345				340			
	Cerebral embolism and thrombosis				Other and ill-defined vascular lesions affecting central nervous system				Inflammatory diseases of central nervous system				Meningitis, except meningococcal and tuberculous			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	7304	7237	10256	10139	1244	1264	1513	1517	377	360	409	406	120	102	74	72
0- ..	2	2	1	1	—	—	—	—	61	60	38	38	49	48	25	24
1- ..	—	—	2	2	—	—	—	—	25	26	20	20	10	10	11	11
5- ..	—	—	—	—	—	—	—	—	5	5	8	8	1	1	1	1
10- ..	—	—	—	—	—	—	—	—	6	7	5	5	1	2	1	1
15- ..	—	—	1	1	—	—	—	—	7	7	5	5	2	2	3	3
20- ..	—	—	—	—	—	—	—	—	4	3	6	6	2	1	1	1
25- ..	—	—	2	2	—	—	—	—	10	10	11	11	3	3	2	2
30- ..	1	1	2	2	—	—	2	2	15	14	19	18	1	—	1	—
35- ..	2	2	5	4	1	1	1	1	24	24	31	31	2	2	2	2
40- ..	8	8	15	14	1	1	3	3	27	26	29	29	5	4	1	1
45- ..	46	42	41	38	3	3	8	7	37	36	46	45	6	5	1	1
50- ..	97	94	97	94	12	11	8	8	38	36	53	53	2	2	1	1
55- ..	264	251	228	221	25	28	16	15	36	34	41	41	9	5	3	3
60- ..	479	473	461	453	57	58	39	38	30	27	34	34	9	6	6	6
65- ..	974	961	983	973	124	125	100	98	21	18	34	33	6	3	6	6
70- ..	1399	1395	1777	1755	217	223	212	217	20	19	12	12	8	6	5	5
75- ..	1746	1733	2382	2352	306	303	359	359	6	5	13	13	2	1	1	1
80- ..	1431	1424	2357	2339	289	295	361	367	3	2	3	3	2	1	2	2
85 and over	855	851	1902	1888	209	216	404	402	2	1	1	1	—	—	1	1



# APPENDIX B—continued

Table 2—continued

Causes of death	340.1				340.3				343				344			
	Pneumococcus				Unspecified cause				Encephalitis, myelitis, and encephalomyelitis (except acute infectious)				Late effects of intracranial abscess or pyogenic infection			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	63	44	35	34	25	26	15	14	46	46	37	36	16	17	24	24
0- ..	17	16	6	6	10	10	4	3	3	3	4	4	5	5	9	10
1- ..	2	2	7	7	4	4	1	1	9	10	4	4	3	3	4	4
5- ..	—	—	—	—	—	—	1	1	3	3	3	3	—	—	2	2
10- ..	—	—	1	1	1	2	—	—	2	2	4	4	2	2	—	—
15- ..	—	—	1	1	2	2	2	2	2	2	1	1	1	1	—	—
20- ..	1	—	1	1	1	1	—	—	1	1	—	—	—	—	1	1
25- ..	2	2	1	1	1	1	—	—	2	2	2	2	—	—	2	2
30- ..	1	—	1	—	—	—	—	—	2	2	2	2	1	1	—	—
35- ..	1	1	—	—	1	1	—	—	2	2	5	4	—	—	—	—
40- ..	4	3	—	—	—	—	1	1	3	3	—	—	1	1	2	2
45- ..	3	2	1	1	3	3	—	—	3	3	2	2	—	—	2	1
50- ..	2	2	—	—	—	—	—	—	3	2	2	2	2	1	1	1
55- ..	9	5	2	2	—	—	—	—	2	2	1	1	1	1	—	—
60- ..	7	4	5	5	1	1	1	1	4	4	3	3	—	—	—	—
65- ..	6	3	4	4	—	—	1	1	1	1	3	3	—	—	—	—
70- ..	5	3	3	3	1	1	1	1	3	3	—	—	—	1	1	1
75- ..	2	1	1	1	—	—	—	—	—	—	1	1	—	—	—	—
80- ..	1	—	1	1	—	—	1	1	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—

Causes of death	350-357				350				351				352			
	Other diseases of central nervous system				Paralysis agitans				Cerebral spastic infantile paralysis				Other cerebral paralysis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	919	932	994	1000	354	356	446	445	25	30	26	27	109	113	169	172
0- ..	4	10	5	9	—	—	—	—	1	7	—	4	—	—	—	—
1- ..	21	21	18	19	—	—	—	—	7	7	8	8	—	—	—	—
5- ..	16	17	12	12	—	—	—	—	4	4	4	4	—	—	—	—
10- ..	24	24	12	12	—	—	—	—	1	1	1	1	—	—	—	—
15- ..	20	20	19	19	—	—	—	—	2	2	1	1	—	—	—	—
20- ..	19	19	8	8	—	—	—	—	1	1	1	1	—	—	—	—
25- ..	16	16	9	10	—	—	—	—	1	1	1	1	—	—	1	1
30- ..	22	22	16	16	—	—	—	—	—	—	1	1	—	—	—	—
35- ..	23	23	17	17	2	2	—	—	—	—	2	2	—	—	1	1
40- ..	19	19	16	16	—	—	—	—	1	1	1	1	1	1	—	—
45- ..	36	35	22	22	7	7	3	3	2	1	—	—	1	1	1	1
50- ..	51	53	33	33	12	12	4	4	—	—	1	—	1	2	2	3
55- ..	57	57	69	69	13	13	15	15	1	1	1	1	2	2	6	5
60- ..	99	99	96	96	34	34	34	34	1	1	1	1	10	10	12	12
65- ..	115	115	127	125	69	69	71	71	2	2	—	—	5	5	23	21
70- ..	149	153	167	166	82	84	102	101	—	—	2	—	35	36	29	31
75- ..	125	126	169	171	79	79	111	111	1	1	—	—	26	27	37	39
80- ..	78	78	122	122	48	48	83	83	—	—	1	1	18	19	25	25
85 and over	25	25	57	58	8	8	23	23	—	—	—	—	10	10	32	33

# APPENDIX B—continued

Table 2—continued

Causes of death	353				356				356-0				357			
	Epilepsy				Motor neurone disease and muscular atrophy				Progressive muscular atrophy				Other diseases of spinal cord			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	211	212	158	160	147	147	122	123	94	94	81	82	16	17	16	16
0- ..	—	—	1	1	2	2	2	2	1	1	—	—	—	—	—	—
1- ..	14	14	10	11	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	11	12	5	5	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	18	18	9	9	2	2	1	1	2	2	—	—	—	—	—	—
15- ..	15	15	17	17	1	1	—	—	1	1	—	—	1	1	—	—
20- ..	17	17	7	7	1	1	—	—	1	1	—	—	—	—	—	—
25- ..	14	14	7	8	1	1	—	—	1	1	—	—	—	—	—	—
30- ..	18	18	14	14	2	2	1	1	1	1	1	1	2	2	—	—
35- ..	16	16	11	11	3	3	1	1	3	3	—	—	2	2	1	1
40- ..	11	11	8	8	5	5	2	2	4	4	1	1	1	1	2	2
45- ..	16	16	11	11	7	7	4	4	4	4	2	2	—	—	—	—
50- ..	10	10	13	13	18	18	8	8	10	10	6	6	1	1	—	—
55- ..	13	13	13	13	22	22	24	25	13	13	13	14	1	1	2	2
60- ..	15	15	11	11	25	24	24	24	13	12	17	17	2	3	4	4
65- ..	10	10	4	4	19	19	20	20	14	14	16	16	4	4	4	4
70- ..	4	4	8	8	20	21	17	17	13	14	13	13	1	1	2	2
75- ..	5	5	4	4	10	10	13	13	6	6	8	8	—	—	1	1
80- ..	2	2	4	4	6	6	5	5	4	4	4	4	1	1	—	—
85 and over	2	2	1	1	3	3	—	—	3	3	—	—	—	—	—	—

Causes of death	360-369				366				380-389				380			
	Diseases of nerves and peripheral ganglia				Other and unspecified forms of neuralgia and neuritis				Other diseases and conditions of eye				Refractive errors			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	14	14	14	15	—	—	3	4	9	9	14	15	—	—	—	1
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- ..	1	1	2	2	—	—	—	—	—	—	—	—	—	—	—	—
35- ..	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—
40- ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
45- ..	1	1	1	1	—	—	1	1	—	—	—	—	—	—	—	—
50- ..	1	1	2	2	—	—	—	—	—	—	—	—	—	—	—	—
55- ..	3	3	—	—	—	—	—	—	1	1	1	2	—	—	—	1
60- ..	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65- ..	1	1	1	1	—	—	1	1	1	1	2	2	—	—	—	—
70- ..	2	2	1	2	—	—	—	1	3	3	2	2	—	—	—	—
75- ..	1	1	1	1	—	—	1	1	3	3	5	5	—	—	—	—
80- ..	—	—	2	2	—	—	—	—	—	—	3	3	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	1	1	1	1	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	390-398				391				392				VII 400-468			
	Diseases of ear and mastoid process				Otitis media without mention of mastoiditis				Otitis media with mastoiditis				Diseases of the Circulatory System			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	54	53	35	35	38	37	27	28	3	3	2	1	47797	47975	46017	46086
0- ..	11	10	9	9	11	10	8	8	—	—	1	1	5	7	5	5
1- ..	4	4	—	—	4	4	—	—	—	—	—	—	7	7	5	5
5- ..	1	1	1	1	1	1	1	1	—	—	—	—	7	7	4	4
10- ..	—	—	2	2	—	—	2	2	—	—	—	—	14	14	8	6
15- ..	1	1	1	1	—	—	1	1	—	—	—	—	28	28	32	34
20- ..	2	2	2	2	1	1	1	1	—	—	—	—	52	59	44	50
25- ..	—	—	1	1	—	—	—	—	—	—	—	—	85	88	74	76
30- ..	2	2	3	3	2	2	2	3	—	—	1	—	165	168	111	116
35- ..	4	4	1	1	1	1	1	1	1	1	—	—	346	355	214	219
40- ..	3	3	1	1	1	1	1	1	—	—	—	—	679	692	326	334
45- ..	4	4	—	—	1	1	—	—	—	—	—	—	1362	1380	558	579
50- ..	6	6	—	—	5	5	—	—	1	1	—	—	2511	2554	938	966
55- ..	8	8	1	1	7	7	1	1	—	—	—	—	3899	3943	1536	1565
60- ..	2	2	3	3	1	1	2	2	—	—	—	—	4817	4856	2800	2821
65- ..	3	3	3	3	1	1	2	2	—	—	—	—	6658	6694	4599	4625
70- ..	1	1	—	—	—	—	—	—	1	1	—	—	7917	7930	7358	7411
75- ..	2	2	3	3	2	2	2	2	—	—	—	—	8102	8128	9323	9335
80- ..	—	—	1	1	—	—	1	1	—	—	—	—	6666	6639	9245	9215
85 and over	—	—	3	3	—	—	2	2	—	—	—	—	4477	4426	8810	8720

Causes of death	400-402				400				401				401-0			
	Rheumatic fever				Rheumatic fever without mention of heart involvement				Rheumatic fever with heart involvement				Active rheumatic pericarditis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	39	39	39	40	—	1	—	1	35	34	32	32	11	11	4	6
0- ..	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	—
1- ..	2	2	—	—	—	—	—	—	2	2	—	—	—	—	—	—
5- ..	2	2	1	1	—	1	—	—	2	1	1	1	—	—	—	—
10- ..	4	4	1	2	—	—	—	—	3	3	1	2	—	—	—	—
15- ..	—	—	5	4	—	—	—	—	—	—	5	4	—	—	—	—
20- ..	2	2	5	5	—	—	—	—	2	2	5	5	—	—	—	—
25- ..	6	5	3	3	—	—	—	—	5	4	3	3	—	—	—	—
30- ..	—	—	4	4	—	—	—	—	—	—	4	4	—	—	—	—
35- ..	2	2	1	1	—	—	—	—	2	2	1	1	—	—	—	1
40- ..	3	3	4	4	—	—	—	—	2	2	4	4	—	—	—	—
45- ..	1	1	3	3	—	—	—	—	1	1	1	1	—	—	—	—
50- ..	4	4	1	1	—	—	—	—	3	3	1	1	2	2	1	1
55- ..	3	4	3	2	—	—	—	—	3	4	1	—	2	2	—	—
60- ..	5	4	3	4	—	—	—	—	5	4	—	1	3	2	—	1
65- ..	3	4	1	1	—	—	—	—	3	4	1	1	2	3	1	1
70- ..	1	1	3	4	—	—	—	1	1	1	3	3	1	1	2	2
75- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- ..	1	1	—	—	—	—	—	—	1	1	—	—	1	1	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	401·1				401·2				401·3				402·0			
	Active rheumatic endocarditis				Active rheumatic myocarditis				Active rheumatic fever with other and multiple types of heart involvement				Without mention of heart involvement			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	6	6	8	9	—	—	4	3	18	17	16	14	3	4	7	5
0- .. ..	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	2	1	1	1	—	—	—	—
10- .. ..	1	1	1	2	—	—	—	—	2	2	—	—	1	1	—	—
15- .. ..	—	—	2	2	—	—	—	—	—	—	3	2	—	—	—	—
20- .. ..	1	1	2	2	—	—	1	1	1	1	2	2	—	—	—	—
25- .. ..	2	1	2	2	—	—	1	1	3	3	—	—	1	1	—	—
30- .. ..	—	—	—	—	—	—	—	—	—	—	4	4	—	—	—	—
35- .. ..	1	1	—	—	—	—	—	—	1	1	1	—	—	—	—	—
40- .. ..	—	—	—	—	—	—	—	—	2	2	4	4	—	1	—	—
45- .. ..	—	—	—	—	—	—	1	1	1	1	—	—	—	—	2	1
50- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	1	1	—	—
55- .. ..	1	2	—	—	—	—	1	—	—	—	—	—	—	—	2	2
60- .. ..	—	—	—	—	—	—	—	—	2	2	—	—	—	—	3	2
65- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
70- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
75- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	402·1				410-416				410				411			
	With heart involvement				Chronic rheumatic heart disease				Diseases of mitral valve				Diseases of aortic valve specified as rheumatic			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1	—	—	2	1490	1504	2630	2641	978	993	1971	1982	170	170	94	93
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	7	7	3	2	4	4	2	2	1	1	—	—
15- .. ..	—	—	—	—	17	17	10	11	10	10	8	8	3	3	—	—
20- .. ..	—	—	—	—	26	26	23	23	14	14	19	19	4	4	—	—
25- .. ..	—	—	—	—	33	33	50	50	18	18	37	37	4	4	—	—
30- .. ..	—	—	—	—	54	54	72	72	33	33	55	55	9	9	3	3
35- .. ..	—	—	—	—	83	83	136	136	60	60	115	115	6	6	3	3
40- .. ..	1	—	—	—	110	109	180	178	75	76	142	140	6	6	5	5
45- .. ..	—	—	—	1	147	145	244	246	102	100	178	180	13	13	8	8
50- .. ..	—	—	—	—	186	187	270	268	123	124	204	203	23	23	13	13
55- .. ..	—	—	—	—	178	180	300	302	103	104	229	229	28	28	7	7
60- .. ..	—	—	—	1	163	166	332	336	106	108	251	255	19	19	16	15
65- .. ..	—	—	—	—	162	165	303	304	110	114	218	219	15	15	11	11
70- .. ..	—	—	—	—	138	144	263	262	95	101	186	185	12	12	11	11
75- .. ..	—	—	—	—	107	108	222	226	75	76	160	165	12	12	9	9
80- .. ..	—	—	—	—	53	54	141	142	34	35	105	106	10	10	3	3
85 and over	—	—	—	—	26	26	81	83	16	16	62	64	5	5	5	5

# APPENDIX B—continued

Table 2—continued

Causes of death	414				415				416				420-422			
	Other endocarditis specified as rheumatic				Other myocarditis specified as rheumatic				Other heart diseases specified as rheumatic				Arteriosclerotic and degenerative heart disease			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	107	106	170	169	41	43	71	75	192	190	319	317	35987	35664	31291	30638
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—
10- ..	1	1	1	—	—	—	—	—	1	1	—	—	1	1	1	—
15- ..	1	1	1	1	1	1	—	—	2	2	—	—	6	6	1	2
20- ..	4	4	1	1	—	—	1	1	4	4	1	2	8	7	2	2
25- ..	6	6	3	3	—	—	1	1	5	5	9	9	28	28	8	8
30- ..	5	5	8	8	—	1	1	1	7	6	5	5	77	77	17	17
35- ..	6	6	4	4	1	1	1	1	10	10	13	13	180	183	29	29
40- ..	11	10	15	15	2	2	3	4	16	15	14	13	461	461	70	69
45- ..	13	13	14	14	4	5	5	5	15	14	39	39	1007	1012	178	181
50- ..	8	8	16	16	8	8	3	3	24	24	32	31	1961	1967	420	425
55- ..	11	11	21	21	3	3	6	6	33	34	37	39	3056	3057	818	805
60- ..	12	12	18	18	6	6	7	7	19	20	40	41	3745	3735	1706	1709
65- ..	8	8	25	25	5	5	15	15	23	22	34	34	5074	5043	3100	3051
70- ..	10	10	14	15	6	6	12	14	15	15	39	36	5959	5909	5106	5044
75- ..	7	7	21	20	3	3	4	4	10	10	28	28	6075	6001	6539	6368
80- ..	3	3	6	6	2	2	7	7	4	4	20	20	4951	4866	6642	6495
85 and over	1	1	2	2	—	—	5	6	4	4	6	5	3395	3308	6652	6431

Causes of death	420				420-0				420-1				420-2			
	Arteriosclerotic heart disease, including coronary disease				Arteriosclerotic heart disease so described				Heart disease specified as involving coronary arteries				Angina pectoris without mention of coronary disease			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	24122	24423	14434	14732	194	193	197	189	23790	24095	14130	14443	138	135	107	100
0- ..	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—
15- ..	1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—
20- ..	3	3	1	1	—	—	—	—	3	3	1	1	—	—	—	—
25- ..	18	18	3	3	—	—	—	—	18	18	3	3	—	—	—	—
30- ..	66	66	13	12	—	—	—	—	66	66	13	12	—	—	—	—
35- ..	166	169	21	21	—	—	—	—	166	169	21	21	—	—	—	—
40- ..	428	429	55	54	—	—	—	—	427	428	55	54	1	1	—	—
45- ..	949	954	140	144	1	1	—	—	944	949	140	144	4	4	—	—
50- ..	1825	1833	319	327	3	3	1	—	1815	1822	317	326	7	8	1	1
55- ..	2754	2770	662	665	5	4	1	1	2739	2756	657	660	10	10	4	4
60- ..	3277	3297	1334	1357	10	9	9	9	3245	3269	1315	1339	22	19	10	9
65- ..	4079	4124	2212	2235	25	24	15	15	4030	4077	2185	2209	24	23	12	11
70- ..	4100	4158	3081	3139	35	34	31	30	4027	4086	3028	3087	38	38	22	22
75- ..	3502	3552	3105	3161	47	47	44	43	3435	3485	3028	3087	20	20	33	31
80- ..	2021	2084	2175	2258	44	46	48	45	1967	2028	2110	2198	10	10	17	15
85 and over	933	965	1311	1354	24	25	48	46	907	938	1255	1301	2	2	8	7

# APPENDIX B—continued

Table 2—continued

Causes of death	421				421·0				421·1				421·3			
	Chronic endocarditis not specified as rheumatic				of mitral valve, specified as non-rheumatic				of aortic valve, not specified as rheumatic				of pulmonary valve, not specified as rheumatic			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	856	882	781	811	42	45	81	93	657	669	449	457	1	3	2	1
0- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
1- .. ..	1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	3	3	—	—	—	—	—	—	2	2	—	—	—	—	—	—
20- .. ..	3	2	—	—	—	—	—	—	2	1	—	—	—	—	—	—
25- .. ..	4	4	1	1	—	—	—	—	3	3	1	1	1	1	—	—
30- .. ..	9	9	1	2	—	—	—	—	8	8	1	2	—	—	—	—
35- .. ..	6	6	5	5	—	—	—	—	5	5	3	3	—	—	—	—
40- .. ..	20	20	4	4	—	—	—	—	18	18	2	2	—	—	—	—
45- .. ..	29	31	15	16	—	1	—	—	24	24	6	7	—	—	—	—
50- .. ..	51	54	35	38	—	1	—	—	39	40	23	25	—	1	—	—
55- .. ..	95	98	31	33	1	1	—	2	80	81	19	19	—	—	—	—
60- .. ..	113	118	79	82	1	2	2	3	96	100	53	54	—	—	—	—
65- .. ..	141	143	113	115	11	10	14	16	109	110	70	68	—	—	2	1
70- .. ..	129	133	148	158	10	9	18	24	94	98	81	84	—	—	—	—
75- .. ..	124	130	147	150	10	11	15	16	85	87	88	87	—	—	—	—
80- .. ..	76	76	115	120	7	8	19	20	50	50	53	56	—	—	—	—
85 and over	51	53	87	87	2	2	13	12	40	40	49	49	—	1	—	—

Causes of death	421·4				422				422·0				422·1			
	Other and ill-defined, not specified as rheumatic				Other myocardial degeneration				Fatty degeneration				With arteriosclerosis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	156	165	249	260	11009	10359	16076	15095	44	41	78	74	4678	4588	6602	6467
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
15- .. ..	1	1	—	—	2	2	1	2	—	—	—	—	—	—	—	—
20- .. ..	1	1	—	—	2	2	1	1	—	—	—	—	—	—	—	—
25- .. ..	—	—	—	—	6	6	4	4	1	1	—	—	—	—	1	1
30- .. ..	1	1	—	—	2	2	3	3	—	—	1	—	—	—	—	—
35- .. ..	1	1	2	2	8	8	3	3	1	1	—	—	1	1	—	—
40- .. ..	2	2	2	2	13	12	11	11	—	—	—	—	2	2	—	—
45- .. ..	5	6	9	9	29	27	23	21	2	1	2	2	6	6	6	6
50- .. ..	12	12	12	13	85	80	66	60	3	3	5	6	23	23	9	8
55- .. ..	14	16	12	12	207	189	125	107	7	5	9	9	58	58	30	30
60- .. ..	16	16	24	25	355	320	293	270	4	5	13	13	132	129	101	98
65- .. ..	21	23	27	30	854	776	775	701	8	7	11	10	362	347	331	324
70- .. ..	25	26	49	50	1730	1618	1877	1747	5	5	11	11	793	778	819	802
75- .. ..	29	32	44	47	2449	2319	3287	3057	5	5	11	11	1072	1058	1452	1412
80- .. ..	19	18	43	44	2854	2706	4352	4117	8	8	11	8	1240	1214	1839	1800
85 and over	9	10	25	26	2411	2290	5254	4990	—	—	4	4	989	972	2014	1986



# APPENDIX B—continued

Table 2—continued

Causes of death	422-2				430-434				430				431			
	Other diseases included under 422				Other diseases of heart				Acute and subacute endocarditis				Acute myocarditis not specified as rheumatic			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	6287	5730	9396	8554	2466	2917	2609	3387	99	98	74	74	27	26	32	33
0- ..	—	—	—	—	4	4	1	1	—	—	—	—	—	—	1	1
1- ..	1	1	—	—	2	2	5	5	1	1	—	—	1	1	2	2
5- ..	—	—	1	1	3	3	1	1	—	—	1	1	—	—	—	—
10- ..	1	1	—	—	1	1	1	2	1	1	—	—	—	—	—	—
15- ..	2	2	1	2	2	2	11	11	—	—	5	5	—	—	—	—
20- ..	2	2	1	1	6	7	7	7	1	1	3	3	—	—	1	1
25- ..	5	5	4	4	5	6	5	5	3	3	2	2	—	—	—	—
30- ..	2	2	1	2	12	12	6	7	5	5	3	3	1	1	—	—
35- ..	6	6	3	3	19	17	19	18	7	7	4	3	1	1	2	2
40- ..	11	10	11	11	29	32	22	23	14	14	4	4	—	—	2	2
45- ..	21	20	15	13	69	65	29	31	14	13	7	7	2	2	3	4
50- ..	59	54	52	46	89	88	58	58	10	10	8	8	4	3	3	3
55- ..	142	126	86	68	190	206	111	132	12	11	13	13	2	3	2	2
60- ..	219	186	179	159	222	250	185	196	7	7	4	4	1	1	5	5
65- ..	484	422	433	367	359	413	253	328	11	11	5	5	4	4	1	1
70- ..	932	835	1047	934	417	492	464	579	11	12	3	3	3	2	2	2
75- ..	1372	1256	1824	1634	435	567	525	749	1	1	7	7	4	4	2	2
80- ..	1606	1484	2502	2309	356	445	511	679	1	1	4	4	—	—	2	2
85 and over	1422	1318	3236	3000	246	305	395	555	—	—	1	2	4	4	4	4

Causes of death	433				434				440-443				440			
	Functional disease of heart				Other and unspecified diseases of heart				Hypertensive heart disease				Essential benign hypertensive heart disease			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	486	1027	767	1635	1847	1759	1730	1639	2664	2708	3375	3499	53	50	89	88
0- ..	1	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	2	2	—	—	1	1	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	3	3	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—
15- ..	1	1	—	—	1	1	5	5	1	1	—	—	—	—	—	—
20- ..	—	—	1	1	5	6	2	2	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	2	3	3	3	1	1	—	—	—	—	—	—
30- ..	1	1	1	1	5	5	2	3	2	2	1	1	—	—	—	—
35- ..	3	3	—	—	8	6	13	13	16	15	2	2	—	—	—	—
40- ..	5	6	2	2	10	12	14	15	18	18	11	11	—	—	—	—
45- ..	13	13	5	7	40	37	14	13	39	39	21	22	3	3	—	—
50- ..	13	15	19	22	62	60	28	25	93	95	57	60	—	—	2	1
55- ..	32	43	32	48	143	148	63	68	178	181	113	121	4	4	5	4
60- ..	37	67	55	77	176	174	121	110	267	273	245	254	6	5	9	10
65- ..	86	154	90	160	256	242	157	162	429	441	410	429	7	6	12	12
70- ..	83	188	142	275	319	289	316	298	550	560	689	714	14	13	16	17
75- ..	84	222	172	404	346	340	343	335	500	503	780	816	10	11	18	17
80- ..	80	196	136	346	275	248	368	326	413	419	652	664	6	5	15	15
85 and over	47	117	110	290	195	184	279	258	157	160	394	405	3	3	12	12

# APPENDIX B—continued

Table 2—continued

Causes of death	441				442				443				444-447			
	Essential malignant hypertensive heart disease				Hypertensive heart disease with arteriolar nephrosclerosis				Other and unspecified hypertensive heart disease				Other hypertensive disease			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	43	51	36	40	57	54	63	61	2511	2553	3187	3310	1647	1720	1887	1873
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
15- ..	—	—	—	—	—	—	—	—	1	1	—	—	1	1	1	2
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	5	12	1	7
25- ..	1	1	—	—	—	—	—	—	—	—	—	—	2	5	—	2
30- ..	—	—	—	—	—	—	—	—	2	2	—	—	12	32	1	5
35- ..	4	4	2	2	—	—	—	—	12	11	1	1	23	32	11	16
40- ..	2	2	1	1	—	—	2	2	16	16	8	8	39	51	14	25
45- ..	2	3	3	3	—	—	—	—	34	33	18	19	46	65	29	42
50- ..	12	14	5	5	—	—	1	1	81	81	49	53	88	125	51	71
55- ..	9	10	5	6	1	1	1	1	164	166	102	110	155	174	85	99
60- ..	6	8	4	4	6	6	3	3	249	254	229	237	168	177	128	124
65- ..	2	3	5	6	10	9	5	5	410	423	388	406	249	250	220	210
70- ..	2	2	6	7	7	7	4	4	527	538	663	686	264	242	324	301
75- ..	3	4	1	2	9	8	18	17	478	480	743	780	282	274	425	395
80- ..	—	—	4	4	15	13	20	19	392	401	613	626	197	185	339	329
85 and over	—	—	—	—	9	10	9	9	145	147	373	384	116	112	256	245

Causes of death	444				445				446				447			
	Essential benign hypertension				Essential malignant hypertension				Hypertension with arteriolar nephrosclerosis				Other hypertensive disease			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	911	1203	1080	1473	174	345	95	207	178	171	195	192	384	1	517	1
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	1	1	1	2	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	4	12	1	7	1	—	—	—	—	—	—	—
25- ..	—	—	—	—	2	5	—	2	—	—	—	—	—	—	—	—
30- ..	2	2	—	—	7	11	1	5	3	2	—	—	—	—	—	—
35- ..	9	9	2	2	10	21	8	14	2	2	—	—	2	—	1	—
40- ..	7	6	4	4	30	45	10	20	—	—	—	1	2	—	—	—
45- ..	14	14	13	13	28	49	12	28	4	2	1	2	—	—	3	—
50- ..	43	52	24	28	29	69	19	41	5	4	2	5	11	—	6	—
55- ..	97	111	51	55	31	56	17	38	7	7	6	6	20	—	11	—
60- ..	103	133	92	100	11	31	11	17	15	13	7	7	39	—	18	—
65- ..	141	194	162	185	18	33	5	12	24	23	13	13	66	—	40	—
70- ..	165	217	202	259	3	6	5	13	18	18	31	29	78	1	86	—
75- ..	171	228	235	339	—	5	4	6	39	41	51	50	72	—	135	—
80- ..	109	157	171	283	—	—	1	2	28	28	45	44	60	—	122	—
85 and over	50	80	124	205	—	1	—	—	32	31	39	39	34	—	93	1

APPENDIX B—continued

Table 2—continued

Causes of death	450-456				450				450.0				450.1			
	Diseases of arteries				General arteriosclerosis				Without mention of gangrene				With mention of gangrene as a consequence			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	2940	2852	3368	3181	2306	2079	2897	2634	2088	1861	2658	2399	218	218	239	235
0- .. ..	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	1	1	3	3	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	3	3	4	4	—	—	—	—	—	—	—	—	—	—	—	—
25- .. ..	8	8	5	5	—	—	—	—	—	—	—	—	—	—	—	—
30- .. ..	4	4	4	4	—	—	—	—	—	—	—	—	—	—	—	—
35- .. ..	14	14	10	11	3	2	1	—	3	2	1	—	—	—	—	—
40- .. ..	14	14	10	9	4	4	2	2	4	4	2	2	—	—	—	—
45- .. ..	27	27	15	15	4	3	2	2	4	3	2	2	—	—	—	—
50- .. ..	54	52	36	37	16	13	8	8	15	12	8	8	1	1	—	—
55- .. ..	94	95	42	40	33	21	21	18	33	21	17	14	—	—	4	4
60- .. ..	179	182	90	85	97	77	46	39	91	71	42	35	6	6	4	4
65- .. ..	284	278	200	191	155	127	132	114	143	115	125	107	12	12	7	7
70- .. ..	485	479	394	364	373	331	315	268	335	294	302	255	38	37	13	13
75- .. ..	627	597	709	654	545	489	638	572	494	439	579	513	51	50	59	59
80- .. ..	630	604	871	815	579	544	804	730	523	486	737	667	56	58	67	63
85 and over	514	491	975	944	497	468	928	880	443	414	843	795	54	54	85	85

Causes of death	451				452				455				456			
	Aortic aneurysm, non-syphilitic, and dissecting aneurysm				Other aneurysm, except of heart and aorta				Gangrene of unspecified cause				Other diseases of arteries			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	488	607	354	431	26	45	13	16	7	8	7	7	70	70	69	65
0- .. ..	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—
15- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	3	3
20- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	2	2	4	4
25- .. ..	1	1	2	2	1	1	—	—	—	—	—	—	6	6	3	3
30- .. ..	3	3	1	1	—	—	—	—	—	—	—	—	1	1	3	3
35- .. ..	4	5	1	2	2	2	1	1	—	—	—	—	3	3	7	7
40- .. ..	3	3	1	1	2	2	1	1	—	—	—	—	5	5	6	5
45- .. ..	12	13	6	6	2	2	—	1	—	—	1	1	9	9	6	5
50- .. ..	31	32	17	18	1	1	1	2	—	—	—	—	5	5	9	8
55- .. ..	37	48	12	13	6	8	2	2	—	—	1	1	14	14	5	5
60- .. ..	69	90	39	41	3	5	—	—	1	1	—	—	5	5	4	4
65- .. ..	105	125	55	65	2	4	1	1	1	1	1	1	12	12	8	7
70- .. ..	97	129	70	87	3	6	1	1	1	2	1	1	3	3	6	6
75- .. ..	67	89	59	69	3	7	1	2	3	3	3	3	2	2	3	3
80- .. ..	44	50	54	72	1	4	4	4	1	1	—	—	1	1	2	2
85 and over	13	17	37	54	—	2	1	1	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	460-468				461				462				463			
	Diseases of veins and other diseases of circulatory system				Haemorrhoids				Varicose veins of other specified sites				Phlebitis and thrombophlebitis of lower extremities			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	564	571	818	827	11	11	6	7	13	12	11	10	60	60	132	133
0- .. ..	1	2	2	2	—	—	—	—	—	—	—	—	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	1	1
20- .. ..	2	2	2	2	—	—	—	—	—	—	—	—	—	—	—	—
25- .. ..	2	2	3	3	—	—	—	—	—	—	1	1	—	—	—	—
30- .. ..	4	4	6	6	—	—	—	—	—	—	—	—	—	—	1	1
35- .. ..	9	9	6	6	1	1	—	—	—	—	—	—	1	1	—	—
40- .. ..	5	4	15	15	—	—	—	—	—	—	—	—	—	—	4	4
45- .. ..	26	26	39	39	—	—	1	1	—	—	—	—	9	9	9	9
50- .. ..	36	36	45	46	—	—	1	1	2	1	—	—	5	5	8	8
55- .. ..	45	46	64	64	1	1	1	1	1	1	1	—	—	—	8	8
60- .. ..	68	69	111	113	1	1	1	1	2	2	2	2	5	5	24	24
65- .. ..	98	100	112	111	1	1	—	—	2	2	1	1	8	8	20	20
70- .. ..	103	103	142	143	1	1	2	2	2	2	1	1	11	11	20	20
75- .. ..	76	78	123	127	2	2	—	—	1	1	1	1	12	12	22	22
80- .. ..	65	65	89	91	2	2	—	—	3	3	1	1	5	5	11	12
85 and over	23	24	57	57	2	2	1	1	—	—	3	3	4	4	4	4

Causes of death	464				465				466				467			
	Phlebitis and thrombophlebitis of other sites				Pulmonary embolism and infarction				Other venous embolism and thrombosis				Other diseases of circulatory system			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	4	5	9	11	266	266	284	286	171	176	277	280	9	11	9	9
0- .. ..	—	—	—	—	1	1	1	1	—	—	—	—	—	1	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	1	1	—	—	—	—	1	1	1	1	—	—	—	—	—	—
25- .. ..	—	—	—	—	2	1	2	2	1	1	—	—	—	—	—	—
30- .. ..	—	—	—	—	2	2	4	4	1	1	1	1	—	—	—	—
35- .. ..	—	—	1	1	5	5	3	3	2	2	2	2	—	—	—	—
40- .. ..	—	—	—	—	2	2	2	2	2	1	6	6	—	—	—	—
45- .. ..	—	—	1	1	11	11	11	11	6	6	10	10	—	—	—	—
50- .. ..	—	—	—	—	11	11	18	19	14	15	12	12	—	—	—	—
55- .. ..	—	—	—	—	24	25	26	26	15	15	19	20	1	1	2	2
60- .. ..	—	—	2	2	38	37	28	29	15	17	38	39	3	3	1	1
65- .. ..	1	1	—	—	45	46	38	38	36	37	39	37	1	1	3	3
70- .. ..	2	2	2	3	56	55	49	49	30	30	51	51	—	1	—	—
75- .. ..	—	—	1	2	33	33	46	46	20	22	43	46	3	3	—	—
80- .. ..	—	—	2	2	29	29	33	33	21	21	36	36	—	—	—	—
85 and over	—	1	—	—	8	8	22	22	7	7	20	20	1	1	3	3

# APPENDIX B—continued

Table 2—continued

Causes of death	468				VIII				470-475				470			
	Certain diseases of lymph nodes and lymph channels				470-527				Acute upper respiratory infections				Acute nasopharyngitis (common cold)			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1	1	7	8	21358	21535	13630	13768	29	28	34	34	3	2	3	3
0- ..	—	—	1	1	495	497	383	386	4	4	6	6	—	—	1	1
1- ..	—	—	—	—	183	184	164	163	7	6	6	6	1	1	—	—
5- ..	1	1	1	1	84	84	83	84	5	5	2	2	—	—	—	—
10- ..	—	—	—	—	104	104	143	144	1	1	—	—	—	—	—	—
15- ..	—	—	—	—	117	117	103	104	—	—	1	1	—	—	—	—
20- ..	—	—	—	—	91	93	99	99	1	1	—	—	—	—	—	—
25- ..	—	—	—	—	75	75	105	108	1	1	—	—	—	—	—	—
30- ..	—	—	—	—	106	109	115	119	—	—	2	2	—	—	—	—
35- ..	—	—	—	—	162	163	141	147	—	—	—	—	—	—	—	—
40- ..	—	—	—	—	291	295	204	209	2	2	—	—	—	—	—	—
45- ..	—	—	—	—	500	517	278	287	—	1	1	1	—	—	—	—
50- ..	—	—	—	—	1180	1202	418	426	—	—	1	1	—	—	—	—
55- ..	—	—	—	—	2018	2044	642	651	1	1	1	1	—	—	—	—
60- ..	—	—	2	2	2776	2810	986	1005	1	1	1	1	—	—	—	—
65- ..	—	—	—	1	3487	3520	1450	1473	1	1	1	1	—	—	—	—
70- ..	—	—	1	1	3375	3392	1900	1927	—	—	3	3	—	—	—	—
75- ..	—	—	1	1	2947	2954	2121	2141	3	3	3	3	—	—	—	—
80- ..	—	—	1	1	1989	1990	2027	2026	2	1	3	3	2	1	—	—
85 and over	—	—	—	—	1378	1385	2268	2269	—	—	3	3	—	—	2	2

Causes of death	473				475				480-483				480			
	Acute tonsillitis				Acute upper respiratory infection of multiple or unspecified sites				Influenza				Influenza with pneumonia			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	8	9	7	7	5	4	5	5	3308	3306	2920	2921	2378	2377	2118	2120
0- ..	—	—	1	1	—	—	1	1	36	36	29	29	28	28	22	22
1- ..	1	1	1	1	3	2	1	1	51	51	35	35	41	41	26	26
5- ..	3	3	1	1	—	—	—	—	41	41	42	42	32	32	35	35
10- ..	—	—	—	—	—	—	—	—	64	64	95	95	49	49	88	88
15- ..	—	—	1	1	—	—	—	—	78	78	78	78	59	59	75	75
20- ..	1	1	—	—	—	—	—	—	44	44	67	67	36	36	60	60
25- ..	—	—	—	—	1	1	—	—	40	40	57	57	34	34	52	52
30- ..	—	—	1	1	—	—	—	—	48	48	57	57	39	39	48	48
35- ..	—	—	—	—	—	—	—	—	60	60	68	68	47	47	56	56
40- ..	—	—	—	—	1	1	—	—	86	85	91	92	73	73	73	74
45- ..	—	1	—	—	—	—	—	—	125	125	113	113	97	97	87	87
50- ..	—	—	—	—	—	—	—	—	227	228	139	139	181	181	110	110
55- ..	1	1	—	—	—	—	—	—	350	350	192	192	270	270	141	141
60- ..	—	—	—	—	—	—	—	—	469	469	252	252	353	353	182	182
65- ..	1	1	—	—	—	—	—	—	543	543	365	366	385	385	263	263
70- ..	—	—	1	1	—	—	—	—	415	414	349	349	284	283	252	252
75- ..	1	1	—	—	—	—	1	1	320	319	321	321	185	185	198	198
80- ..	—	—	1	1	—	—	1	1	166	166	276	276	107	107	180	180
85 and over	—	—	—	—	—	—	1	1	145	145	294	293	78	78	170	171

# APPENDIX B—continued

Table 2—continued

Causes of death	481				482				483				490-493			
	Influenza with other respiratory manifestations, and influenza unqualified				Influenza with digestive manifestations, but without respiratory symptoms				Influenza with nervous manifestations, but without digestive or respiratory symptoms				Pneumonia			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	908	907	774	775	6	6	13	12	16	16	15	14	6389	6420	5985	5997
0- ..	6	6	6	6	1	1	—	—	1	1	1	1	366	369	279	281
1- ..	9	9	7	7	—	—	1	1	1	1	1	1	92	93	102	102
5- ..	7	7	3	3	—	—	—	—	2	2	4	4	29	29	25	26
10- ..	10	10	4	4	—	—	—	—	5	5	3	3	29	29	34	34
15- ..	15	15	3	3	—	—	—	—	4	4	—	—	26	26	15	15
20- ..	8	8	7	7	—	—	—	—	—	—	—	—	32	33	25	25
25- ..	5	5	4	4	—	—	1	1	1	1	—	—	22	22	34	35
30- ..	9	9	8	8	—	—	—	—	—	—	1	1	34	35	31	33
35- ..	13	13	12	12	—	—	—	—	—	—	—	—	47	47	44	45
40- ..	13	12	18	18	—	—	—	—	—	—	—	—	86	86	59	59
45- ..	28	28	25	25	—	—	—	—	—	—	1	1	132	135	91	91
50- ..	44	45	29	29	—	—	—	—	2	2	—	—	289	291	134	134
55- ..	80	80	47	48	—	—	1	1	—	—	3	2	385	390	225	223
60- ..	115	115	68	68	1	1	1	1	—	—	1	1	607	609	366	367
65- ..	156	156	101	102	2	2	1	1	—	—	—	—	825	831	526	526
70- ..	131	131	95	95	—	—	2	2	—	—	—	—	900	902	820	821
75- ..	134	133	122	122	1	1	1	1	—	—	—	—	979	981	972	976
80- ..	58	58	93	93	1	1	3	3	—	—	—	—	842	842	1014	1013
85 and over	67	67	122	121	—	—	2	1	—	—	—	—	667	670	1189	1191

Causes of death	490				491				492				493			
	Lobar pneumonia				Bronchopneumonia				Primary atypical pneumonia				Pneumonia, other and unspecified			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	985	989	676	674	4972	4998	4947	4969	62	63	58	58	370	370	304	296
0- ..	15	16	15	15	313	318	226	230	11	11	15	15	27	24	23	21
1- ..	8	8	9	9	77	78	80	80	2	2	4	4	5	5	9	9
5- ..	4	4	1	1	23	23	22	23	—	—	—	—	2	2	2	2
10- ..	6	6	9	9	18	18	21	21	3	3	—	—	2	2	4	4
15- ..	4	4	3	3	17	17	11	11	2	2	—	—	3	3	1	1
20- ..	11	11	3	3	12	13	16	17	1	1	2	2	8	8	4	3
25- ..	2	2	6	6	16	17	22	23	—	—	3	3	4	3	3	3
30- ..	7	7	9	10	19	19	20	21	1	1	—	—	7	8	2	2
35- ..	13	14	7	7	25	25	32	33	3	3	3	3	6	5	2	2
40- ..	14	16	14	14	63	62	41	41	3	3	2	2	6	5	2	2
45- ..	38	38	20	20	80	81	59	59	4	4	2	2	10	12	10	10
50- ..	65	65	24	23	197	198	95	96	3	3	3	3	24	25	12	12
55- ..	118	118	35	34	245	249	176	176	6	6	4	4	16	17	10	9
60- ..	109	110	53	55	452	457	283	285	9	9	4	4	37	33	26	23
65- ..	147	147	87	86	615	620	414	416	5	6	3	3	58	58	22	21
70- ..	146	145	104	102	696	698	679	682	1	1	6	6	57	58	31	31
75- ..	135	135	107	107	794	795	805	809	4	4	7	7	46	47	53	53
80- ..	80	80	87	87	726	723	878	877	3	3	—	—	33	36	49	49
85 and over	63	63	83	83	584	587	1067	1069	1	1	—	—	19	19	39	39



# APPENDIX B—continued

Table 2—continued

Causes of death	500-502				500				501				502			
	Bronchitis				Acute bronchitis				Bronchitis unqualified				Chronic bronchitis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	9,888	9,882	4,031	4,090	736	740	719	728	470	471	419	440	8,682	8,671	2,893	2,922
0- ..	69	70	50	50	56	56	34	34	9	10	14	14	4	4	2	2
1- ..	26	27	20	19	21	22	15	15	4	4	4	4	1	1	1	1
5- ..	5	5	9	9	3	3	5	5	1	1	3	3	1	1	1	1
10- ..	5	5	8	9	3	3	7	8	2	1	1	1	—	1	—	—
15- ..	6	6	6	7	4	4	5	5	1	1	—	—	1	1	1	2
20- ..	3	3	5	5	2	2	4	3	—	—	1	2	1	1	—	—
25- ..	1	1	6	7	1	1	2	2	—	—	2	3	—	—	2	2
30- ..	11	12	12	12	2	2	3	5	2	1	3	3	7	9	6	4
35- ..	34	34	18	21	3	3	6	7	4	4	1	1	27	27	11	13
40- ..	72	75	36	38	9	9	8	8	4	4	1	3	59	62	27	27
45- ..	172	182	55	61	8	8	10	11	6	9	6	5	158	165	39	43
50- ..	524	535	108	110	32	34	15	15	18	21	6	7	474	480	87	88
55- ..	1,030	1,028	178	182	42	42	23	26	26	29	7	12	962	957	148	144
60- ..	1,441	1,449	308	313	62	62	33	33	36	44	26	30	1,343	1,343	249	250
65- ..	1,831	1,830	474	490	66	65	60	60	77	72	29	31	1,688	1,693	385	399
70- ..	1,792	1,770	673	690	110	108	82	84	79	76	48	48	1,603	1,586	543	558
75- ..	1,479	1,468	752	761	117	119	114	114	85	84	71	82	1,277	1,265	567	563
80- ..	883	878	657	653	101	103	121	122	60	56	73	70	722	719	463	461
85 and over..	504	504	656	653	94	94	172	171	56	54	123	121	354	356	361	361

Causes of death	502.0				502.1				510-527				517			
	Bronchitis with emphysema				Others included under 502				Other diseases of respiratory system				Other diseases of upper respiratory tract			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	4,457	4,461	767	781	4,225	4,210	2,126	2,141	1,744	1,899	660	726	14	10	9	—
0- ..	1	1	—	—	3	3	2	2	20	18	19	20	3	2	1	—
1- ..	1	1	—	—	—	—	1	—	7	7	1	1	2	2	1	—
5- ..	1	1	—	—	—	—	1	1	4	4	5	5	1	1	1	—
10- ..	—	—	—	—	—	1	—	—	5	5	6	6	—	—	—	—
15- ..	—	—	1	1	1	1	—	1	7	7	3	3	—	—	—	—
20- ..	1	1	—	—	—	—	—	—	11	12	2	2	1	1	—	—
25- ..	—	—	—	—	—	—	2	2	11	11	8	9	1	1	—	—
30- ..	5	6	1	1	2	3	5	3	13	14	13	15	1	1	—	—
35- ..	13	14	1	4	14	13	10	9	21	22	11	13	—	—	—	—
40- ..	32	32	9	9	27	30	18	18	45	47	18	20	—	—	1	—
45- ..	98	106	20	21	60	59	19	24	71	74	18	21	—	—	—	—
50- ..	302	304	36	38	172	176	51	50	140	148	36	42	—	—	1	—
55- ..	577	575	43	41	385	382	105	103	252	275	46	53	—	—	—	—
60- ..	843	843	93	97	500	500	156	153	258	282	59	72	2	1	1	—
65- ..	944	939	114	120	744	754	271	279	287	315	84	90	1	—	—	—
70- ..	764	762	154	158	839	824	389	400	268	306	55	64	—	—	2	—
75- ..	516	518	142	139	761	747	425	426	166	183	73	80	2	1	—	—
80- ..	245	246	91	91	477	473	372	370	96	103	77	81	—	—	—	—
85 and over..	114	112	62	61	240	244	299	300	62	66	126	129	—	—	1	—

# APPENDIX B—continued

Table 2—continued

Causes of death	519				521				523				524			
	Pleurisy				Abscess of lung				Pneumoconiosis due to silica and silicates (occupational)				Other specified pneumoconiosis and pulmonary fibrosis of occupational origin			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	8	8	10	9	35	35	15	16	376	373	5	5	9	10	3	3
0- ..	1	1	1	1	—	—	1	1	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—
30- ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
35- ..	—	—	—	—	1	1	—	—	3	3	—	—	—	—	—	—
40- ..	—	—	—	—	3	3	—	—	3	3	—	—	—	—	—	—
45- ..	—	—	—	—	1	1	—	—	19	18	—	—	—	—	1	1
50- ..	—	—	—	—	3	3	—	1	38	36	1	1	—	—	1	1
55- ..	2	2	—	—	7	7	2	1	66	66	—	—	3	4	—	—
60- ..	1	1	1	1	4	4	1	2	67	68	2	2	1	1	1	1
65- ..	1	1	2	1	5	5	3	3	68	70	2	2	3	3	—	—
70- ..	1	1	1	1	6	6	1	1	60	58	—	—	2	2	—	—
75- ..	2	2	1	2	2	2	2	2	38	37	—	—	—	—	—	—
80- ..	—	—	3	2	—	—	1	1	13	13	—	—	—	—	—	—
85 and over	—	—	1	1	—	—	1	1	1	1	—	—	—	—	—	—

Causes of death	526				527				IX 530-587				530-539			
	Bronchiectasis				Other diseases of lung and pleural cavity				Diseases of the Digestive System				Diseases of buccal cavity and oesophagus			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	524	685	252	320	539	537	110	110	4,144	4,143	3,431	3,431	54	56	48	51
0- ..	—	—	1	1	10	9	10	10	181	180	112	111	4	5	—	—
1- ..	1	1	—	—	3	3	—	—	48	48	34	33	1	—	1	1
5- ..	—	—	3	3	—	—	—	—	27	27	11	11	—	—	—	—
10- ..	1	1	2	2	—	—	—	—	14	14	11	11	—	—	—	—
15- ..	4	4	1	1	1	1	—	—	14	14	14	14	—	—	—	—
20- ..	9	10	—	—	—	—	1	1	14	14	15	15	—	—	1	1
25- ..	6	6	4	5	3	3	—	—	24	24	17	17	—	—	—	—
30- ..	8	9	11	13	2	2	—	—	47	47	26	26	—	—	—	—
35- ..	12	13	7	9	2	2	2	2	65	65	33	33	2	2	1	1
40- ..	22	24	13	17	12	12	1	1	91	93	60	62	—	—	2	3
45- ..	30	35	11	14	16	15	6	6	188	187	78	78	1	1	1	1
50- ..	45	55	22	26	40	41	4	4	253	252	165	165	2	2	4	4
55- ..	71	96	25	33	79	77	10	10	423	421	213	213	7	7	—	—
60- ..	69	94	32	45	90	88	11	11	452	451	299	299	3	4	3	3
65- ..	87	111	37	45	96	97	20	20	540	539	447	447	5	6	4	4
70- ..	80	116	23	32	94	98	12	12	621	622	551	553	7	6	6	7
75- ..	48	66	29	35	53	53	15	15	541	543	572	571	9	10	6	6
80- ..	19	28	17	22	27	25	9	9	391	394	476	474	11	11	9	9
85 and over	12	16	14	17	11	11	9	9	210	208	297	298	2	2	10	11

# APPENDIX B—continued

Table 2—continued

Causes of death	533				535				537				538			
	Disorders of occlusion, eruption, and tooth development				Other diseases of teeth and supporting structures				Diseases of salivary glands				Other diseases of buccal cavity			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	2	—	4	3	—	—	—	1	11	11	21	22	1	5	2	4
0- ..	—	—	—	—	—	—	—	—	1	1	—	—	—	1	—	—
1- ..	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40- ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1
45- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55- ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
60- ..	—	—	2	1	—	—	1	—	—	—	—	—	1	—	—	—
65- ..	—	—	—	—	—	—	—	—	—	—	1	1	1	2	—	—
70- ..	1	—	—	—	—	—	—	—	1	1	3	3	—	—	—	1
75- ..	—	—	—	—	—	—	—	—	4	4	3	3	—	1	1	1
80- ..	—	—	—	—	—	—	—	—	2	2	5	5	—	—	1	1
85 and over	—	—	—	—	—	—	—	—	2	2	9	10	—	—	—	—

Causes of death	540-545				540				540-0				540-1			
	Diseases of stomach and duodenum				Ulcer of stomach				Without mention of perforation				With perforation			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1832	1830	742	739	835	832	468	466	602	601	350	347	233	231	118	111
0- ..	3	3	1	1	3	3	—	—	1	1	—	—	2	2	—	—
1- ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	1	1	—	—	1	1	—	—	—	—	—	—	1	1	—	—
15- ..	1	1	—	—	1	1	—	—	—	—	—	—	1	1	—	—
20- ..	2	2	1	1	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	8	8	1	1	5	5	—	—	4	4	—	—	1	1	—	—
30- ..	15	15	3	3	4	4	2	2	2	2	—	—	2	2	2	2
35- ..	13	13	5	5	5	5	3	3	1	1	1	1	4	4	2	2
40- ..	41	41	13	12	15	14	9	8	10	10	5	5	5	4	4	3
45- ..	80	80	9	9	27	27	5	5	21	21	2	2	6	6	3	3
50- ..	128	128	29	28	47	47	18	17	34	34	14	14	13	13	4	3
55- ..	206	206	43	43	95	94	24	24	65	64	19	19	30	30	5	5
60- ..	225	223	51	51	106	104	29	29	79	77	24	23	27	27	5	6
65- ..	258	257	98	97	114	114	57	57	82	82	34	33	32	32	23	24
70- ..	324	325	133	133	155	156	78	78	113	114	60	60	42	42	18	18
75- ..	266	267	142	142	123	123	101	101	88	88	80	80	35	35	21	21
80- ..	165	165	127	127	76	76	88	88	55	56	70	69	21	20	18	19
85 and over	93	92	86	86	58	58	54	54	47	47	41	41	11	11	13	13



# APPENDIX B—continued

Table 2—continued

Causes of death	541				541·0				541·1				544			
	Ulcer of duodenum				Without mention of perforation				With perforation				Disorders of function of stomach			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	932	932	228	227	582	579	145	145	350	353	83	82	3	3	3	4
0 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 .. ..	1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—
10 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 .. ..	2	2	1	1	1	1	1	1	1	1	—	—	—	—	—	—
5 .. ..	2	2	—	—	2	2	—	—	—	—	—	—	—	—	—	—
10 .. ..	10	10	1	1	5	5	1	1	5	5	—	—	—	—	—	—
5 .. ..	8	8	2	2	4	4	2	2	4	4	—	—	—	—	—	—
10 .. ..	23	24	3	3	15	16	2	2	8	8	1	1	—	—	—	—
5 .. ..	49	49	2	2	32	32	1	1	17	17	1	1	—	—	—	—
10 .. ..	72	72	9	9	44	44	3	3	28	28	6	6	1	1	—	—
5 .. ..	100	101	16	16	63	64	13	13	37	37	3	3	1	1	—	—
10 .. ..	112	112	22	22	70	70	13	13	42	42	9	9	—	—	—	—
5 .. ..	137	136	32	31	80	78	20	20	57	58	12	11	—	—	2	2
10 .. ..	158	158	47	47	94	92	27	27	64	66	20	20	1	1	—	1
5 .. ..	138	138	36	36	88	88	23	23	50	50	13	13	—	—	—	—
10 .. ..	86	86	33	33	59	59	20	20	27	27	13	13	—	—	1	1
5 and over ..	34	33	24	24	25	24	19	19	9	9	5	5	—	—	—	—

Causes of death	545				550-553				550				550·0			
	Other diseases of stomach and duodenum				Appendicitis				Acute appendicitis				Without mention of peritonitis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	27	28	20	19	263	264	140	140	223	224	119	119	31	30	10	10
0 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1 .. ..	—	—	—	—	8	8	5	5	8	8	5	5	2	2	1	1
5 .. ..	—	—	—	—	7	7	2	2	6	6	2	2	2	2	—	—
10 .. ..	—	—	—	—	7	7	5	5	7	7	5	5	—	—	—	—
5 .. ..	—	—	—	—	5	5	3	3	4	4	2	2	—	—	—	—
10 .. ..	—	—	—	—	7	7	1	1	5	5	1	1	—	—	—	—
5 .. ..	—	—	—	—	7	7	—	—	6	6	—	—	1	1	—	—
10 .. ..	1	1	—	—	9	9	4	4	9	9	3	3	1	1	—	—
5 .. ..	—	—	—	—	7	7	1	1	6	6	1	1	—	—	—	—
10 .. ..	—	—	1	1	8	8	4	4	7	7	3	3	—	—	—	—
5 .. ..	4	4	2	2	12	12	6	6	11	11	6	6	1	1	1	1
10 .. ..	5	5	2	2	14	15	11	11	10	11	6	6	1	1	—	—
5 .. ..	5	5	2	2	29	29	7	7	23	23	5	5	4	4	1	1
10 .. ..	2	2	—	—	28	28	15	15	22	23	13	13	1	2	3	3
5 .. ..	2	2	5	5	35	35	20	20	28	28	19	19	5	5	—	—
10 .. ..	3	3	5	4	35	35	16	16	33	33	15	15	5	4	2	2
5 .. ..	3	4	1	1	23	23	18	18	20	20	16	16	4	4	—	—
10 .. ..	2	2	1	1	17	17	13	13	14	13	11	11	4	3	1	1
5 and over ..	—	—	1	1	5	5	9	9	4	4	6	6	—	—	1	1

# APPENDIX B—continued

Table 2—continued

Causes of death	550-1				560-561				560				570-578			
	With peritonitis				Hernia of abdominal cavity				Hernia of abdominal cavity without mention of obstruction				Other diseases of intestines and peritoneum			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	192	194	109	109	381	380	390	389	104	103	81	80	868	866	1102	1101
0- ..	—	—	—	—	45	44	9	8	35	34	9	8	93	91	70	70
1- ..	6	6	4	4	8	8	2	2	5	5	2	2	24	25	18	18
5- ..	4	4	2	2	—	—	—	—	—	—	—	—	9	9	5	5
10- ..	7	7	5	5	—	—	—	—	—	—	—	—	3	3	4	4
15- ..	4	4	2	2	—	—	—	—	—	—	—	—	6	6	7	7
20- ..	5	5	1	1	—	—	—	—	—	—	—	—	5	5	8	8
25- ..	5	5	—	—	—	—	—	—	—	—	—	—	7	7	10	10
30- ..	8	8	3	3	2	2	1	1	—	—	—	—	11	11	10	10
35- ..	6	6	1	1	—	—	1	1	—	—	—	—	26	26	10	10
40- ..	7	7	3	3	1	1	1	2	—	—	—	—	18	19	19	19
45- ..	10	10	5	5	8	8	2	2	5	5	1	1	40	39	28	28
50- ..	9	10	6	6	10	10	18	18	1	1	2	2	50	47	46	46
55- ..	19	19	4	4	30	30	20	20	9	9	2	2	58	57	66	66
60- ..	21	21	10	10	35	34	32	31	12	12	7	7	71	71	82	82
65- ..	23	23	19	19	44	44	55	55	8	8	15	15	97	97	133	133
70- ..	28	29	13	13	60	61	74	74	11	11	18	18	110	111	161	161
75- ..	16	16	16	16	56	56	80	80	8	8	11	11	114	114	165	165
80- ..	10	10	10	10	52	52	63	63	2	2	10	10	75	78	165	165
85 and over	4	4	5	5	30	30	32	32	8	8	4	4	51	50	95	95

Causes of death	570				570-1				570-2				570-3			
	Intestinal obstruction without mention of hernia				Paralytic ileus				Mesenteric infarction				Volvulus			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	311	313	306	307	2	3	6	6	87	89	120	120	95	92	70	70
0- ..	16	14	16	15	—	—	1	1	—	—	1	1	5	5	4	4
1- ..	3	3	2	2	—	—	1	1	—	—	—	—	—	—	1	1
5- ..	3	3	2	2	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	4	4	—	—	—	—	—	—	—	—	—	—	3	3	—	—
20- ..	2	2	—	—	—	—	—	—	1	1	—	—	1	1	—	—
25- ..	3	3	1	1	—	—	—	—	—	—	—	—	—	—	—	—
30- ..	2	3	—	—	1	1	—	—	—	1	—	—	1	1	—	—
35- ..	7	7	—	—	—	—	—	—	4	4	—	—	—	2	—	—
40- ..	6	6	3	3	—	—	—	—	2	2	2	2	1	1	1	1
45- ..	10	10	10	10	—	—	—	—	3	3	3	3	6	6	2	2
50- ..	21	21	8	9	1	1	—	—	8	8	4	4	6	6	3	3
55- ..	18	18	12	11	—	—	—	—	8	8	5	5	2	2	2	2
60- ..	28	28	26	25	—	—	—	—	9	9	12	12	7	7	4	4
65- ..	45	45	39	41	—	—	—	—	17	17	26	26	14	13	4	4
70- ..	49	49	58	59	—	1	2	2	11	11	26	26	18	17	14	14
75- ..	45	45	41	41	—	—	2	2	14	15	12	12	15	14	12	12
80- ..	32	35	54	54	—	—	—	—	8	8	18	18	7	7	15	15
85 and over	17	17	34	34	—	—	—	—	2	2	11	11	7	7	7	7

# APPENDIX B—continued

Table 2—continued

Causes of death	570·4				570·5				572				572·1			
	Impaction of intestine				Others included under 570				Chronic enteritis and ulcerative colitis				Diverticulitis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	4	2	20	18	110	114	80	85	272	276	461	469	161	165	276	285
0 .. ..	3	1	1	—	2	2	2	2	—	—	1	1	—	—	1	1
1 .. ..	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—
5 .. ..	—	—	—	—	—	—	—	—	—	—	3	3	—	—	—	—
10 .. ..	—	—	—	—	1	1	—	—	1	1	7	7	—	—	—	—
15 .. ..	—	—	—	—	—	—	—	—	3	3	7	7	—	—	—	—
20 .. ..	—	—	—	—	1	1	1	1	4	4	7	7	—	—	—	—
25 .. ..	—	—	—	—	1	1	—	—	6	6	7	7	—	—	—	—
30 .. ..	—	—	—	—	1	1	—	—	13	13	9	9	—	—	—	—
35 .. ..	—	—	—	—	3	3	—	—	8	8	14	14	3	3	2	2
40 .. ..	—	—	1	1	1	1	4	4	21	20	14	14	8	8	1	1
45 .. ..	—	—	—	—	6	6	1	2	18	18	27	26	8	7	8	8
50 .. ..	—	—	2	1	8	8	3	3	24	25	33	33	17	18	17	18
55 .. ..	—	—	1	1	12	12	9	9	31	31	37	37	19	19	21	21
60 .. ..	—	—	2	2	13	14	6	8	26	26	67	69	18	18	46	47
65 .. ..	—	—	2	2	20	20	14	14	36	36	66	69	25	25	54	57
70 .. ..	1	1	4	4	15	15	11	11	36	40	77	79	28	32	60	62
75 .. ..	—	—	4	4	16	19	16	18	29	29	57	59	22	22	42	44
80 and over	—	—	3	3	8	8	13	13	16	16	28	28	13	13	24	24

Causes of death	572·2				572·3				573				575			
	Ulcerative colitis				Others included under 572				Functional disorders of intestines				Abscess of anal and rectal regions			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	87	86	158	157	6	7	6	6	5	5	7	6	7	7	7	6
0 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 .. ..	—	—	3	3	—	—	—	—	—	—	—	—	—	—	—	—
15 .. ..	1	1	7	7	—	—	—	—	—	—	—	—	—	—	—	—
20 .. ..	3	3	6	6	—	—	—	—	—	—	—	—	—	—	—	—
25 .. ..	3	3	7	7	—	—	—	—	—	—	—	—	—	—	—	—
30 .. ..	5	5	6	6	—	—	—	—	—	—	—	—	—	—	1	1
35 .. ..	10	10	8	8	—	—	—	—	—	—	—	—	—	—	—	—
40 .. ..	4	4	10	10	—	—	—	—	—	—	—	—	—	—	—	—
45 .. ..	12	11	9	9	—	—	1	1	—	—	—	—	—	—	—	—
50 .. ..	9	9	16	15	—	1	—	—	—	—	1	1	—	—	—	—
55 .. ..	5	5	12	11	—	—	—	—	—	—	—	—	2	2	1	1
60 .. ..	9	9	14	14	2	2	—	—	1	1	1	1	1	1	1	1
65 .. ..	6	6	20	21	—	—	—	—	—	—	—	—	—	—	—	—
70 .. ..	8	8	10	10	—	—	—	—	1	1	1	1	2	2	2	1
75 .. ..	6	6	15	15	—	—	2	2	3	3	—	—	1	1	2	2
80 .. ..	4	4	11	11	3	3	3	3	—	—	2	1	—	—	—	—
85 and over	2	2	4	4	1	1	—	—	—	—	2	2	1	1	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	576				578				580-587				581			
	Peritonitis				Other diseases of intestines and peritoneum				Diseases of liver, gallbladder, and pancreas				Cirrhosis of liver			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	23	24	32	32	82	73	93	84	746	747	1009	1012	345	343	266	2
0- ..	3	3	3	3	3	3	—	—	36	37	32	33	7	6	3	—
1- ..	—	1	—	—	—	—	2	1	6	6	8	8	—	—	—	—
5- ..	1	—	—	—	1	1	—	—	9	9	4	4	2	2	—	—
10- ..	—	—	1	1	1	1	—	—	3	3	2	2	—	—	1	—
15- ..	—	—	—	—	—	—	—	—	2	2	4	4	2	2	1	3
20- ..	—	—	—	—	—	—	1	1	—	—	4	4	—	—	—	—
25- ..	—	—	—	—	—	—	—	—	2	2	6	6	2	2	1	—
30- ..	—	—	—	—	1	1	1	1	10	10	8	8	6	6	2	—
35- ..	—	—	—	—	3	3	1	1	17	17	15	15	14	14	5	—
40- ..	—	—	—	—	4	5	1	2	23	24	21	21	20	21	11	—
45- ..	1	2	—	—	3	2	1	1	47	47	32	32	31	31	14	—
50- ..	1	1	2	2	7	5	5	5	49	50	57	58	28	29	24	—
55- ..	3	3	3	3	8	6	9	8	93	92	77	79	58	57	39	—
60- ..	—	—	3	3	7	7	5	7	90	91	116	116	52	52	37	—
65- ..	6	6	4	4	5	5	14	11	101	100	137	137	46	45	44	—
70- ..	3	3	8	8	8	8	11	9	85	84	161	161	35	34	47	—
75- ..	2	2	7	7	19	15	17	15	73	73	161	160	17	17	19	—
80- ..	1	1	1	1	6	6	17	14	71	71	99	99	18	18	10	—
85 and over	2	2	1	1	6	5	8	8	29	29	65	65	7	7	5	—

Causes of death	584				585				587				X 590-637			
	Cholelithiasis				Cholecystitis and cholangitis without mention of calculi				Diseases of pancreas				Diseases of the Genito-Urinary System			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	125	126	276	277	99	99	207	205	124	126	179	181	3734	3668	1819	17
0- ..	—	—	—	—	1	1	1	1	26	28	27	28	15	16	9	—
1- ..	—	—	—	—	—	—	—	—	6	6	8	8	6	6	9	—
5- ..	—	—	—	—	—	—	—	—	5	5	4	4	13	13	5	—
10- ..	—	—	—	—	—	—	—	—	2	2	1	1	19	19	13	—
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	25	25	18	—
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	40	33	27	—
25- ..	—	—	—	—	—	—	—	—	—	—	4	4	47	46	25	—
30- ..	—	—	3	3	—	—	—	—	3	3	—	—	34	34	33	—
35- ..	—	—	1	1	1	1	—	—	1	1	4	4	60	54	55	—
40- ..	—	—	5	5	—	—	1	1	1	1	2	2	82	77	55	—
45- ..	2	2	6	6	5	5	3	3	3	3	2	2	82	76	58	—
50- ..	4	4	15	16	5	5	10	10	6	6	5	5	156	141	100	—
55- ..	9	9	18	19	5	5	7	7	16	16	9	9	171	160	134	—
60- ..	11	12	24	24	11	11	27	27	10	10	18	18	261	251	195	—
65- ..	20	20	43	43	12	12	20	20	18	18	25	25	409	404	202	—
70- ..	18	18	48	48	14	14	28	27	12	12	25	25	551	554	261	—
75- ..	27	27	51	50	19	19	48	48	8	8	30	30	686	686	256	—
80- ..	22	22	39	39	19	19	36	36	6	6	9	9	629	630	213	—
85 and over	12	12	23	23	7	7	26	25	1	1	6	7	448	443	151	—

# APPENDIX B—continued

Table 2—continued

Causes of death	590-594				590				591				592			
	Nephritis and nephrosis				Acute nephritis				Nephritis with oedema, including nephrosis				Chronic nephritis			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1175	1112	946	927	38	36	34	33	110	107	62	61	881	848	750	742
0- .. ..	5	5	2	2	4	4	2	2	—	—	—	—	—	—	—	—
1- .. ..	2	2	4	4	—	—	—	—	2	1	3	2	—	1	1	2
5- .. ..	12	12	3	3	1	1	2	2	7	7	—	—	4	4	1	1
10- .. ..	16	16	12	12	4	4	2	2	5	5	—	1	7	7	7	6
15- .. ..	23	23	14	13	2	2	3	3	6	6	1	1	15	15	9	9
20- .. ..	34	27	24	20	2	1	2	1	4	4	1	1	25	21	20	18
25- .. ..	44	43	19	18	7	7	2	2	5	5	2	2	31	31	14	13
30- .. ..	28	28	26	25	—	—	—	—	4	4	1	1	24	24	23	24
35- .. ..	50	44	39	36	2	2	3	3	7	6	5	4	35	33	29	28
40- .. ..	65	60	34	32	3	3	3	3	7	6	2	2	50	50	24	23
45- .. ..	65	59	30	29	—	—	—	—	6	6	2	2	48	47	24	24
50- .. ..	108	93	64	60	3	3	1	1	9	9	5	5	77	73	50	49
55- .. ..	107	96	79	77	1	1	—	—	9	9	5	5	78	72	68	68
60- .. ..	100	91	101	98	2	1	1	1	10	10	9	9	73	67	80	80
65- .. ..	127	125	99	98	2	2	5	5	12	12	7	7	99	95	77	77
70- .. ..	117	118	117	119	—	—	2	2	7	7	8	8	96	95	93	94
75- .. ..	124	124	108	112	2	2	3	3	5	5	5	5	102	100	89	88
80- .. ..	93	94	96	97	3	3	1	1	4	4	4	4	74	73	76	77
85 and over ..	55	52	75	72	—	—	2	2	1	1	2	2	43	40	65	61

Causes of death	593				594				600-609				600			
	Nephritis not specified as acute or chronic				Other renal sclerosis				Other diseases of urinary system				Infections of kidney			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	141	116	93	83	5	5	7	8	675	671	769	766	368	369	506	505
0- .. ..	1	1	—	—	—	—	—	—	10	11	7	6	5	6	4	4
1- .. ..	—	—	—	—	—	—	—	—	4	4	4	4	3	3	3	3
5- .. ..	—	—	—	—	—	—	—	—	1	1	2	2	—	—	1	1
10- .. ..	—	—	1	1	—	—	2	2	3	3	1	1	—	—	—	—
15- .. ..	—	—	1	—	—	—	—	—	2	2	4	4	1	1	2	2
20- .. ..	3	1	1	—	—	—	—	—	6	6	2	2	3	3	2	2
25- .. ..	1	—	—	—	—	—	—	—	3	3	5	5	1	1	3	3
30- .. ..	—	—	2	—	—	—	—	—	6	6	4	4	3	3	4	4
35- .. ..	6	3	2	1	—	—	—	—	10	10	12	12	5	5	8	8
40- .. ..	5	1	5	4	—	—	—	—	17	17	13	12	7	7	9	9
45- .. ..	10	5	4	3	1	1	—	—	15	15	19	19	10	10	11	11
50- .. ..	19	8	8	5	—	—	—	—	32	32	27	26	18	18	13	13
55- .. ..	19	14	5	3	—	—	1	1	34	34	49	50	19	19	31	31
60- .. ..	15	13	11	8	—	—	—	—	65	64	82	82	42	41	59	59
65- .. ..	13	15	10	9	1	1	—	—	97	94	91	91	46	45	66	66
70- .. ..	13	15	13	14	1	1	1	1	114	116	131	130	67	69	84	83
75- .. ..	14	16	10	15	1	1	1	1	106	108	137	136	59	58	96	95
80- .. ..	12	14	14	14	—	—	1	1	96	93	106	106	55	56	66	66
85 and over ..	10	10	6	6	1	1	—	1	54	52	73	74	24	24	44	45

**APPENDIX B—continued**

**Table 2—continued**

Causes of death	603				606				609				610-617		610	
	Other diseases of kidney and ureter				Other diseases of bladder				Other diseases of urethra				Diseases of male genital organs		Hyperplasia of prostate	
	M		F		M		F		M		F		M		M	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	17	16	15	13	43	40	13	13	19	18	13	13	1884	1885	1838	184
0- ..	1	1	1	—	1	1	—	—	1	1	—	—	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
10- ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	—
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—
30- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
40- ..	—	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—
45- ..	—	—	2	2	1	1	—	—	—	—	—	—	2	2	1	1
50- ..	2	2	2	2	1	1	1	1	—	—	—	—	16	16	16	1
55- ..	—	—	1	1	3	3	1	1	1	1	2	2	30	30	27	2
60- ..	2	2	2	2	4	4	3	3	1	1	—	—	96	96	91	9
65- ..	7	6	1	1	3	7	1	1	3	3	—	—	185	185	178	17
70- ..	—	—	2	2	6	6	—	—	4	4	2	2	320	320	316	31
75- ..	1	1	1	1	5	5	1	1	—	1	—	—	456	454	439	43
80- ..	3	3	—	—	4	3	2	2	4	3	3	3	440	443	435	43
85 and over	—	—	1	1	7	6	3	3	5	4	4	4	339	339	335	33

Causes of death	611		XI 640-689 Deliveries and Complications of Pregnancy, Childbirth, and the Puerperium		640-649		642		660		670		678		680-689	
	Prostatitis				Complications of pregnancy		Toxaemias of pregnancy		Delivery without mention of complication		Delivery complicated by placenta praevia or antepartum haemorrhage		Delivery with other complications of childbirth		Complications of the puerperium	
	M		F		F		F		F		F		F		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	33	31	176	170	58	54	39	35	5	4	12	11	6	7	27	2
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	1	1	—	—	—	—	1	1	—	—	—	—	—	—
15- ..	—	—	7	7	5	5	3	3	—	—	—	—	—	—	—	—
20- ..	—	—	27	27	4	4	3	3	1	1	—	—	—	—	6	—
25- ..	—	—	42	43	11	12	7	8	1	1	3	3	2	2	10	1
30- ..	—	—	44	42	18	17	14	13	2	1	2	2	1	2	6	—
35- ..	—	—	38	38	11	11	5	5	—	—	3	3	3	3	5	—
40- ..	—	—	11	9	6	4	4	2	—	—	3	3	—	—	—	—
45- ..	1	1	3	3	1	1	1	1	—	—	—	—	—	—	—	—
50- ..	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—
55- ..	2	2	1	—	1	—	1	—	—	—	—	—	—	—	—	—
60- ..	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65- ..	5	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70- ..	2	2	1	—	1	—	—	—	—	—	—	—	—	—	—	—
75- ..	14	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- ..	4	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	687		XII				690-698				692			
	Cerebral haemorrhage in the puerperium		690-716				Infections of skin and subcutaneous tissue				Other cellulitis and abscess without mention of lymphangitis			
	F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1	—	102	101	137	138	37	39	46	46	16	19	24	24
0- ..	—	—	5	4	5	5	4	3	4	4	1	1	4	4
1- ..	—	—	3	3	1	1	2	2	1	1	1	1	—	—
5- ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	1	1	2	2	—	—	2	2	—	—	—	—
20- ..	—	—	2	2	—	—	—	—	—	—	—	—	—	—
25- ..	—	—	2	2	2	2	2	2	—	—	1	1	—	—
30- ..	1	—	1	1	4	4	1	1	2	2	—	—	1	1
35- ..	—	—	1	1	2	2	—	—	1	1	—	—	—	—
40- ..	—	—	2	2	2	2	—	—	1	1	—	—	1	1
45- ..	—	—	5	5	3	3	3	3	2	2	1	1	1	1
50- ..	—	—	7	7	7	8	3	3	1	1	—	—	—	—
55- ..	—	—	7	7	8	7	3	3	4	4	3	3	2	2
60- ..	—	—	6	5	6	6	2	2	3	3	2	2	2	2
65- ..	—	—	13	13	13	13	5	6	3	3	1	2	—	—
70- ..	—	—	16	16	19	19	5	5	5	5	2	2	3	3
75- ..	—	—	10	10	26	26	3	3	9	9	2	2	5	5
80- ..	—	—	13	14	13	13	2	3	3	3	1	2	3	3
85 and over	—	—	8	8	23	24	2	3	5	5	1	2	2	2

Causes of death	698				700-716				704				705			
	Other local infections of skin and subcutaneous tissue				Other diseases of skin and subcutaneous tissue				Pemphigus				Erythematous conditions			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	6	5	5	5	65	62	91	92	12	12	19	20	17	16	10	11
.. ..	3	2	—	—	1	1	1	1	—	—	—	—	1	1	—	—
.. ..	1	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	2	2	—	—	—	—	—	—	2	2	—	—
.. ..	—	—	—	—	—	—	2	2	—	—	—	—	—	—	1	1
.. ..	—	—	—	—	1	1	1	1	—	—	—	—	—	—	1	1
.. ..	—	—	—	—	2	2	1	1	—	—	—	—	1	1	—	—
.. ..	1	1	—	—	2	2	1	1	—	—	—	—	—	—	2	3
.. ..	—	—	—	—	4	4	6	7	1	1	—	—	—	—	1	1
.. ..	—	—	—	—	4	4	4	3	—	—	—	—	1	1	—	—
.. ..	—	—	1	1	4	3	3	3	—	—	—	—	2	1	—	—
.. ..	—	—	1	1	8	7	10	10	1	1	4	4	5	5	3	3
.. ..	—	—	—	—	11	11	14	14	3	3	4	4	3	3	—	—
.. ..	—	—	2	2	7	7	17	17	3	3	7	7	1	1	1	1
.. ..	1	1	—	—	11	11	10	10	4	4	2	2	—	—	—	—
and over	—	—	—	—	6	5	18	19	—	—	2	3	1	1	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	710				715				XIII 720-749				720-727			
	Other hypertrophic and atrophic conditions of skin				Chronic ulcer of skin				Diseases of the Bones and Organs of Movement				Arthritis and rheumatism except rheumatic fever			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	11	11	21	20	15	13	33	33	300	298	591	589	156	157	460	460
0- ..	—	—	—	—	—	—	—	—	8	8	5	4	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	5	4	2	2	—	—	—	—
5- ..	—	—	1	1	—	—	—	—	1	1	1	1	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	5	5	1	1	—	—	—	—
15- ..	1	1	—	—	—	—	—	—	19	19	2	2	—	—	—	—
20- ..	—	—	—	—	—	—	—	—	4	4	2	2	—	—	—	—
25- ..	—	—	1	1	—	—	—	—	5	4	3	3	1	1	—	—
30- ..	—	—	2	2	—	—	—	—	4	4	4	4	—	—	1	1
35- ..	—	—	—	—	—	—	—	—	3	4	5	5	1	2	3	3
40- ..	—	—	—	—	—	—	—	—	5	5	7	7	2	2	4	4
45- ..	2	2	1	1	—	—	—	—	9	9	7	7	4	4	4	4
50- ..	3	3	3	3	—	—	—	—	15	14	24	23	9	9	17	17
55- ..	2	2	3	2	—	—	—	—	16	15	33	33	9	9	27	27
60- ..	1	1	2	2	—	—	1	1	30	30	48	49	21	21	33	33
65- ..	1	1	3	3	1	—	—	—	35	35	72	73	22	22	58	58
70- ..	—	—	2	2	3	3	7	7	38	38	86	86	28	28	74	74
75- ..	1	1	1	1	1	1	5	5	45	46	115	114	25	25	94	94
80- ..	—	—	2	2	5	5	4	4	39	39	111	110	23	23	91	91
85 and over	—	—	—	—	5	4	16	16	14	14	63	63	11	11	54	54

Causes of death	722				723				725				740-749			
	Rheumatoid arthritis and allied conditions				Osteo-arthritis (arthrosis) and allied conditions				Arthritis, unspecified				Other diseases of musculoskeletal system			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	91	92	346	345	53	53	101	102	—	—	2	3	62	59	52	52
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	4	4	3	3
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	2	2	1	1
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	4	4	1	1
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	17	17	2	2
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	4	4	2	2
25- ..	1	1	—	—	—	—	—	—	—	—	—	—	3	2	2	2
30- ..	—	—	1	1	—	—	—	—	—	—	—	—	1	1	3	3
35- ..	1	2	2	2	—	—	—	—	—	—	—	—	1	1	2	2
40- ..	1	1	3	3	1	1	1	1	—	—	—	—	2	2	3	3
45- ..	4	4	4	4	—	—	—	—	—	—	—	—	3	3	2	2
50- ..	5	5	12	12	2	2	3	3	—	—	—	—	5	4	3	3
55- ..	3	3	25	24	5	5	1	1	—	—	1	—	5	4	3	3
60- ..	13	13	28	29	6	6	4	4	—	—	—	—	2	2	4	4
65- ..	15	15	49	50	5	5	7	7	—	—	1	1	5	5	6	6
70- ..	20	20	58	58	4	4	13	13	—	—	—	—	1	1	8	8
75- ..	16	16	66	66	9	9	27	27	—	—	—	—	3	3	5	5
80- ..	9	9	67	66	13	13	22	22	—	—	1	1	—	—	2	2
85 and over	3	3	31	30	8	8	23	24	—	—	—	—	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	745				XIV 750-759				750				751			
	Curvature of spine				Congenital Malformations				Monstrosity				Spina bifida and meningocele			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
Infants	9	6	17	14	1262	1264	1189	1192	29	29	51	52	215	167	287	229
1-4 years	—	—	1	1	846	847	786	786	29	29	51	52	198	152	263	210
5-9 years	—	—	—	—	87	89	84	83	—	—	—	—	12	10	13	8
10-14 years	—	—	1	1	42	42	22	22	—	—	—	—	—	—	2	2
15-19 years	—	—	—	—	23	23	22	22	—	—	—	—	1	1	1	1
20-24 years	1	1	1	1	29	29	19	18	—	—	—	—	—	—	2	2
25-29 years	—	—	—	—	9	9	9	9	—	—	—	—	—	—	1	1
30-34 years	1	—	1	1	17	17	21	21	—	—	—	—	—	—	2	2
35-39 years	—	—	1	1	14	15	11	11	—	—	—	—	—	—	—	—
40-44 years	—	—	1	1	18	17	17	17	—	—	—	—	—	—	—	—
45-49 years	—	—	—	—	17	17	20	20	—	—	—	—	1	1	—	—
50-54 years	1	1	—	—	34	34	40	40	—	—	—	—	—	—	—	—
55-59 years	1	—	1	—	25	26	28	29	—	—	—	—	—	—	1	1
60-64 years	3	2	1	1	30	28	38	38	—	—	—	—	2	2	—	—
65-69 years	1	1	—	—	15	15	18	17	—	—	—	—	—	—	—	—
70-74 years	1	1	—	—	21	21	18	18	—	—	—	—	1	1	1	1
75-79 years	—	—	3	2	19	19	17	20	—	—	—	—	—	—	—	—
80-84 years	—	—	4	3	8	8	14	15	—	—	—	—	—	—	1	1
85-89 years	—	—	1	1	7	7	5	6	—	—	—	—	—	—	—	—
90 years and over	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—

Causes of death	752				753				754				755			
	Congenital hydrocephalus				Other congenital malformations of nervous system and sense organs				Congenital malformations of circulatory system				Cleft palate and harelip			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
Infants	56	104	47	101	42	43	42	46	514	513	466	465	5	5	3	2
1-4 years	28	73	35	84	18	19	23	27	325	325	270	268	4	4	3	2
5-9 years	21	24	8	13	11	11	12	12	30	30	34	33	1	1	—	—
10-14 years	2	2	—	—	5	5	1	1	20	20	17	17	—	—	—	—
15-19 years	—	—	1	1	—	—	1	1	19	19	14	14	—	—	—	—
20-24 years	2	2	1	1	—	—	—	—	17	17	11	10	—	—	—	—
25-29 years	1	1	—	—	1	1	1	1	5	5	6	6	—	—	—	—
30-34 years	—	—	—	—	1	1	1	1	13	13	14	14	—	—	—	—
35-39 years	—	—	—	—	1	1	—	—	9	10	6	6	—	—	—	—
40-44 years	—	—	—	—	—	—	2	2	13	12	8	8	—	—	—	—
45-49 years	1	1	—	—	1	1	—	—	3	3	9	9	—	—	—	—
50-54 years	—	—	1	1	2	2	—	—	13	12	18	18	—	—	—	—
55-59 years	—	—	—	—	—	—	1	1	9	9	13	14	—	—	—	—
60-64 years	1	1	1	1	—	—	—	—	15	15	20	20	—	—	—	—
65-69 years	—	—	—	—	—	—	—	—	8	8	7	6	—	—	—	—
70-74 years	—	—	—	—	1	1	—	—	8	8	7	7	—	—	—	—
75-79 years	—	—	—	—	—	—	—	—	4	4	7	9	—	—	—	—
80-84 years	—	—	—	—	—	—	—	—	1	1	5	6	—	—	—	—
85-89 years	—	—	—	—	1	1	—	—	2	2	—	—	—	—	—	—
90 years and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	756				756.0				756.1				756.2			
	Congenital malformations of digestive system				Congenital hypertrophic pyloric stenosis				Imperforate anus				Others included in 7			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	145	148	91	93	15	16	5	5	17	18	7	6	113	114	79	
0- ..	113	114	67	67	14	15	5	5	17	18	7	6	82	81	55	
1- ..	5	5	9	9									5	5	9	
5- ..	3	3											3	3		
10- ..			1	1											1	
15- ..	1	1	1	1									1	1	1	
20- ..																
25- ..																
30- ..	1	1											1	1		
35- ..			1	1											1	
40- ..																
45- ..	1	2	1	1									1	2	1	
50- ..	3	4			1	1							2	3		
55- ..	2	2											2	2		
60- ..	2	2	1	1					3	3			2	2	1	
65- ..	1	1											1	1		
70- ..	6	6	4	5									6	6	4	
75- ..	6	6	4	4									6	6	4	
80- ..			2	3											2	
85 and over	1	1											1	1		

Causes of death	757				757.1				757.0, .2, .3				758			
	Congenital malformations of genito-urinary system				Polycystic disease of kidney				Others included under 757				Congenital malformations of bone and joint			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	146	145	116	116	68	69	88	88	78	76	28	28	14	14	21	
0- ..	58	57	16	16	15	16	5	5	43	41	11	11	9	9	14	
1- ..	2	2	4	4					2	2	4	4	1	1	1	
5- ..	9	9	1	1					9	9	1	1				
10- ..	3	3	3	3			2	2	3	3	1	1				
15- ..	7	7	1	1					7	7	1	1			2	
20- ..	1	1	1	1					1	1	1	1				
25- ..	3	3	2	2	1	1	1	1	2	2	1	1				
30- ..	3	3	5	5	1	1	2	2	2	2	3	3				
35- ..	4	4	3	3	4	4	3	3								
40- ..	8	8	10	10	6	6	10	10	2	2			1	1		
45- ..	12	12	19	19	9	9	16	16	3	3	3	3	1	1	1	
50- ..	10	10	10	10	9	9	10	10	1	1			1	1		
55- ..	5	5	14	14	4	4	14	14	1	1						
60- ..	3	3	6	6	3	3	6	6							1	
65- ..	6	6	10	10	6	6	8	8			2	2				
70- ..	8	8	5	5	7	7	5	5	1	1					1	
75- ..	1	1	3	3	1	1	3	3							1	
80- ..	3	3	3	3	2	2	3	3	1	1			1	1		
85 and over																

## Table 2—continued

[illegible][illegible]

\* Note: The group 760-776 relates particularly to the causes of death within the first 28 days of life, but it includes also some deaths from the causes specified at all ages.

# APPENDIX B—continued

Table 2—continued

Causes of death	766				768				769				770-776			
	Pemphigus neonatorum				Other sepsis of newborn				Neonatal disorders arising from certain diseases of the mother during pregnancy				Other diseases peculiar to early infancy			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	2	3	2	2	3	8	6	12	34	37	31	31	1127	1156	813	8
0- ..	2	3	2	2	3	8	6	12	34	37	31	31	1124	1153	811	8
1- ..	—	—	—	—	—	—	—	—	—	—	—	—	3	3	2	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
60- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	770				771				773				774			
	Haemolytic disease of newborn (erythroblastosis)				Haemorrhagic disease of newborn				Ill-defined diseases peculiar to early infancy				Immaturity with mental of any other subsidiary condition			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	84	84	91	90	57	56	35	35	42	70	35	68	41	43	28	—
0- ..	82	82	89	88	57	56	35	35	42	70	35	68	40	42	28	—
1- ..	2	2	2	2	—	—	—	—	—	—	—	—	1	1	—	—
5- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
60- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	776				XVI 780-795				780-789				782			
	Immaturity unqualified				Symptoms, Senility, and Ill-defined Conditions				Symptoms referable to systems or organs				Symptoms referable to cardiovascular and lymphatic system			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	900	900	623	621	1303	1441	2370	2587	34	64	32	77	23	52	23	66
0- .. ..	900	900	623	621	11	10	7	6	4	4	—	—	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	2	—	—	—	1	—	—	—	—
5- .. ..	—	—	—	—	1	1	—	—	1	1	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
20- .. ..	—	—	—	—	3	3	—	—	—	—	—	—	—	—	—	—
25- .. ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
30- .. ..	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—
35- .. ..	—	—	—	—	2	2	2	2	1	1	1	1	1	1	1	1
40- .. ..	—	—	—	—	1	1	1	1	—	—	1	1	—	—	1	1
45- .. ..	—	—	—	—	1	1	3	3	—	—	1	1	—	—	1	1
50- .. ..	—	—	—	—	8	8	6	7	5	5	2	2	4	4	2	2
55- .. ..	—	—	—	—	—	—	4	4	—	—	3	3	—	—	1	1
60- .. ..	—	—	—	—	2	4	4	5	1	1	1	2	1	—	1	2
65- .. ..	—	—	—	—	10	12	6	7	2	4	—	1	1	3	—	1
70- .. ..	—	—	—	—	62	76	80	87	4	13	4	7	3	12	4	7
75- .. ..	—	—	—	—	189	211	300	333	4	6	7	16	3	5	5	13
80- .. ..	—	—	—	—	427	469	639	694	8	16	9	25	7	15	5	21
85 and over	—	—	—	—	583	640	1318	1435	4	13	3	17	3	12	2	16

Causes of death	782-4				783				784				788			
	Acute heart failure, undefined				Symptoms referable to respiratory system				Symptoms referable to upper gastro-intestinal tract				Other general symptoms			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	19	48	22	65	—	1	—	—	4	4	5	6	1	1	1	2
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- .. ..	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—
40- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
45- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
50- .. ..	3	3	2	2	—	—	—	—	—	—	—	—	—	—	—	—
55- .. ..	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	—
60- .. ..	1	—	1	2	—	1	—	—	—	—	—	—	—	—	—	—
65- .. ..	—	2	—	1	—	—	—	—	1	1	—	—	—	—	—	—
70- .. ..	3	12	4	7	—	—	—	—	—	—	—	—	—	—	—	—
75- .. ..	2	4	5	13	—	—	—	—	1	1	1	2	—	—	—	—
80- .. ..	6	14	4	20	—	—	—	—	1	1	2	2	—	—	1	1
85 and over	3	12	2	16	—	—	—	—	1	1	1	1	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	790-795				792				794				795			
	Senility and ill-defined diseases				Uraemia				Senility without mention of psychosis				Ill-defined and unknown causes of mortality			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	1269	1377	2338	2510	7	8	8	7	1238	1344	2313	2483	24	25	17	2
0- .. ..	7	6	7	6	—	—	—	—	—	—	—	—	7	6	7	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15- .. ..	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	3	3	—	—	—	—	—	—	—	—	—	—	3	3	—	—
25- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—
30- .. ..	2	2	—	—	1	1	—	—	—	—	—	—	1	1	—	—
35- .. ..	1	1	1	1	—	—	—	—	—	—	—	—	1	1	1	—
40- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—
45- .. ..	1	1	2	2	—	—	1	1	—	—	—	—	1	1	1	—
50- .. ..	3	3	4	5	—	—	2	2	—	—	—	—	3	3	2	—
55- .. ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—	1	—
60- .. ..	1	3	3	3	1	1	1	1	—	—	1	1	—	2	1	—
65- .. ..	8	8	6	6	1	1	—	—	5	5	6	6	2	2	—	—
70- .. ..	58	63	76	80	1	1	1	1	56	61	72	76	1	1	3	—
75- .. ..	185	205	293	317	1	1	1	1	183	203	291	315	1	1	1	—
80- .. ..	419	453	630	669	1	2	—	—	417	450	630	668	1	1	—	—
85 and over	579	627	1315	1418	1	1	2	1	577	625	1313	1417	1	1	—	—

Causes of death	XVII				RAILWAY ACCIDENTS								MOTOR VEHICLE TRAFFIC ACCIDENT			
	E800-E999				E800-E802				E800				E810-E825			
	Accidents, Poisonings, and Violence (External Cause)				Railway accidents				involving railroad employee				Motor vehicle traffic accidents			
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	6573	6560	4336	4319	130	126	8	8	69	65	—	—	2059	2056	733	733
0- .. ..	150	148	123	119	—	—	—	—	—	—	—	—	2	2	2	2
1- .. ..	151	150	107	107	4	4	1	1	—	—	—	—	49	49	33	34
5- .. ..	135	135	72	71	1	1	—	—	—	—	—	—	69	68	35	35
10- .. ..	162	162	41	41	4	4	1	1	—	—	—	—	62	61	23	23
15- .. ..	368	368	59	58	7	6	—	—	2	2	—	—	221	222	36	36
20- .. ..	492	492	78	78	4	4	—	—	—	—	—	—	318	318	45	45
25- .. ..	361	361	76	74	5	5	—	—	3	3	—	—	165	165	22	22
30- .. ..	318	318	85	85	11	11	1	1	8	7	—	—	111	111	24	23
35- .. ..	347	347	111	111	11	11	—	—	6	6	—	—	105	105	22	22
40- .. ..	378	378	117	117	13	13	—	—	7	7	—	—	110	110	23	23
45- .. ..	449	449	179	179	9	8	1	1	5	4	—	—	115	115	37	37
50- .. ..	478	477	252	250	13	12	—	—	10	9	—	—	104	103	35	35
55- .. ..	484	484	288	288	17	16	—	—	13	12	—	—	107	107	55	55
60- .. ..	486	483	283	283	16	16	1	1	11	11	—	—	110	110	61	61
65- .. ..	402	402	321	318	4	4	—	—	3	3	—	—	99	99	64	64
70- .. ..	417	414	424	423	5	5	1	1	1	1	—	—	103	103	68	68
75- .. ..	418	418	537	537	4	4	—	—	—	—	—	—	101	100	83	83
80- .. ..	330	329	556	553	2	2	1	1	—	—	—	—	73	73	46	46
85 and over	247	245	627	627	—	—	1	1	—	—	—	—	35	35	19	19

# APPENDIX B—continued

Table 2—continued

Causes of death	MOTOR VEHICLE TRAFFIC ACCIDENTS															
	E812				E813				E815				E816			
	to pedestrian				to pedal cyclist				to rider or passenger of motorcycle in collision with other motor vehicle				Other motor vehicle traffic accident involving two or more motor vehicles			
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	634	632	419	419	254	253	44	43	432	433	40	40	240	238	129	130
0- .. ..	—	—	—	—	—	—	—	—	1	1	—	—	1	1	2	2
1- .. ..	38	38	26	26	2	2	—	—	1	1	2	2	5	5	4	5
5- .. ..	54	53	28	28	9	9	2	2	1	1	—	—	4	4	3	3
0- .. ..	19	18	9	9	34	34	9	9	—	—	1	1	4	4	1	1
5- .. ..	13	13	1	1	28	28	5	5	91	91	6	6	10	10	11	11
0- .. ..	12	12	7	7	12	12	3	3	132	132	9	9	31	31	15	15
5- .. ..	11	11	3	3	10	10	3	3	66	66	2	2	26	25	6	6
0- .. ..	15	15	4	4	9	9	4	4	26	26	4	4	21	21	8	8
5- .. ..	12	12	6	6	8	8	4	4	26	26	4	4	22	22	2	2
0- .. ..	15	15	8	8	12	12	3	3	27	28	3	3	24	23	6	6
5- .. ..	20	20	12	12	18	18	3	3	26	26	4	4	21	21	11	11
0- .. ..	29	29	13	13	18	17	1	1	14	14	2	2	24	24	10	10
5- .. ..	41	41	27	27	28	28	5	5	11	11	—	—	13	13	18	18
0- .. ..	44	45	40	40	20	20	2	2	6	6	3	3	15	14	8	8
5- .. ..	63	63	46	46	20	20	—	—	3	3	—	—	5	5	13	13
0- .. ..	72	72	62	62	13	13	—	—	1	1	—	—	5	6	3	3
5- .. ..	82	81	67	67	9	9	—	—	—	—	—	—	7	7	5	5
0- .. ..	60	60	42	42	4	4	—	—	—	—	—	—	2	2	3	3
5 and over	34	34	18	18	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	MOTOR VEHICLE TRAFFIC ACCIDENTS															
	E820				E822				E823				E824			
	while boarding or alighting				involving overturning in roadway				involving running off roadway				Other non-collision motor vehicle traffic accident			
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	14	14	5	7	27	26	10	11	142	143	38	37	32	31	17	15
0- .. ..	—	—	—	—	—	—	—	—	3	3	1	1	—	—	—	—
1- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
5- .. ..	1	1	—	—	—	—	—	—	1	1	—	—	2	2	1	1
0- .. ..	—	—	—	—	3	3	1	2	18	18	5	4	—	—	—	—
5- .. ..	—	—	—	—	7	7	—	—	30	30	7	7	3	3	—	—
0- .. ..	—	—	—	1	5	5	—	—	10	11	3	3	4	3	2	1
5- .. ..	—	—	—	—	1	—	—	—	14	15	3	3	2	2	—	—
0- .. ..	—	—	—	—	2	2	1	1	14	14	3	3	1	1	—	—
5- .. ..	1	1	—	—	4	4	—	—	10	10	1	1	3	3	1	1
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	1	1	—	—	1	1	2	2	7	7	1	1	1	1	2	2
0- .. ..	—	—	—	1	—	—	—	—	7	7	4	4	1	1	2	1
5- .. ..	1	1	—	—	1	1	2	2	9	9	1	1	1	1	—	—
0- .. ..	2	2	—	—	3	3	2	2	10	10	3	3	3	3	3	3
5- .. ..	1	1	—	—	—	—	1	1	4	4	1	1	1	1	1	1
0- .. ..	3	3	—	—	—	—	—	—	4	3	2	2	3	3	—	—
5- .. ..	2	2	4	4	—	—	1	1	—	—	2	2	1	1	4	4
0- .. ..	1	1	—	—	—	—	—	—	1	1	1	1	5	5	—	—
5 and over	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death	M.V. TRAFFIC ACCIDENTS				MOTOR VEHICLE NON-TRAFFIC ACCIDENTS											
	E825				E830-E835				E830				E831			
	of unspecified nature				Motor vehicle non-traffic accidents				to pedestrian				to pedal cyclist			
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	9	11	9	9	37	41	4	4	25	26	4	4	1	2	—	—
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- ..	—	—	—	—	3	3	1	1	2	2	1	1	1	1	—	—
5- ..	—	—	1	1	—	—	1	1	—	—	1	1	—	—	—	—
10- ..	—	—	—	—	—	—	1	1	—	—	1	1	—	—	—	—
15- ..	2	3	1	1	3	3	—	—	—	—	—	—	—	—	—	—
20- ..	1	1	1	1	6	7	—	—	2	2	—	—	—	—	—	—
25- ..	1	2	1	1	2	2	—	—	1	1	—	—	—	—	—	—
30- ..	2	2	—	—	2	2	—	—	2	2	—	—	—	—	—	—
35- ..	—	—	1	1	—	—	1	1	—	—	1	1	—	—	—	—
40- ..	—	—	—	—	3	3	—	—	3	3	—	—	—	—	—	—
45- ..	—	—	1	1	2	2	—	—	2	2	—	—	—	—	—	—
50- ..	1	1	—	—	—	1	—	—	—	—	—	—	1	—	—	—
55- ..	—	—	1	1	4	4	—	—	3	3	—	—	—	—	—	—
60- ..	—	—	—	—	5	5	—	—	5	5	—	—	—	—	—	—
65- ..	1	1	1	1	3	3	—	—	2	2	—	—	—	—	—	—
70- ..	1	1	1	1	3	4	—	—	2	2	—	—	—	—	—	—
75- ..	—	—	—	—	1	2	—	—	1	2	—	—	—	—	—	—
80- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	M.V. NON-TRAFFIC ACCIDENTS				E840-E845				E843				E850-E858			
	E835				Other road vehicle accidents				Accident to rider of pedal cycle not involving collision with motor vehicle				Water transport accidents			
	of other and unspecified nature															
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	6	8	—	—	82	83	24	25	63	64	9	10	81	82	4	—
0- ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
1- ..	—	—	—	—	1	1	—	—	1	1	—	—	1	1	—	—
5- ..	—	—	—	—	1	1	—	—	—	—	—	—	2	2	—	—
10- ..	—	—	—	—	6	7	1	1	6	7	—	—	3	3	—	—
15- ..	2	2	—	—	10	10	1	1	10	10	—	—	15	15	1	—
20- ..	2	3	—	—	2	2	1	1	2	2	1	1	8	8	1	—
25- ..	—	—	—	—	6	6	3	3	6	6	3	3	9	9	1	—
30- ..	—	—	—	—	1	1	—	—	1	1	—	—	6	7	—	—
35- ..	—	—	—	—	2	2	1	1	2	2	1	1	4	4	—	—
40- ..	—	—	—	—	3	3	1	1	3	3	1	1	3	3	—	—
45- ..	—	—	—	—	4	4	—	—	4	4	—	—	8	8	—	—
50- ..	—	—	—	—	7	7	2	2	6	6	1	1	11	11	—	—
55- ..	—	—	—	—	4	4	4	4	2	2	2	2	3	3	—	—
60- ..	—	—	—	—	6	6	—	—	3	3	—	—	2	2	—	—
65- ..	1	1	—	—	9	9	4	4	7	7	—	—	5	5	—	—
70- ..	1	2	—	—	7	7	2	2	4	4	—	—	1	1	—	—
75- ..	—	—	—	—	6	6	—	—	2	2	—	—	—	—	—	—
80- ..	—	—	—	—	4	4	4	4	3	3	—	—	—	—	—	—
85 and over	—	—	—	—	3	3	—	—	1	1	—	—	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	E850				E851				E857				E860-E866			
	Submersion of occupant of small boat				Other water transport injury by submersion				Other specified accidents in water transport				Aircraft accidents			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	36	37	3	3	21	20	—	—	8	9	1	1	38	39	1	1
0- .. ..	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
1- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0- .. ..	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	12	12	1	1	3	3	—	—	—	—	—	—	—	—	—	—
0- .. ..	3	3	1	1	4	4	—	—	1	1	—	—	7	7	1	1
5- .. ..	4	4	1	1	4	4	—	—	—	—	—	—	8	8	—	—
0- .. ..	—	1	—	—	4	3	—	—	1	2	—	—	10	11	—	—
5- .. ..	2	2	—	—	—	—	—	—	—	—	—	—	10	10	—	—
0- .. ..	1	1	—	—	—	—	—	—	—	—	—	—	2	2	—	—
5- .. ..	—	—	—	—	3	3	—	—	1	1	—	—	—	—	—	—
0- .. ..	6	6	—	—	1	1	—	—	1	1	—	—	1	1	—	—
5- .. ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
0- .. ..	1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—
5- .. ..	1	1	—	—	1	1	—	—	3	3	—	—	—	—	—	—
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	E866				ACCIDENTAL POISONING											
	Other and unspecified aircraft accidents				E870-E888				E874				E878			
					Accidental poisoning by solid and liquid substances				by other analgesic and soporific drugs				by other and unspecified drugs			
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	2	3	—	—	76	75	93	93	3	3	6	7	10	9	3	2
0- .. ..	—	—	—	—	1	1	2	2	—	—	—	1	—	—	1	—
1- .. ..	—	—	—	—	5	5	3	3	—	—	—	—	1	1	1	1
5- .. ..	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
0- .. ..	—	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—
5- .. ..	—	—	—	—	3	3	1	1	—	—	—	—	—	—	—	—
0- .. ..	—	—	—	—	1	1	1	1	—	—	—	—	—	—	—	—
5- .. ..	—	—	—	—	1	1	3	3	—	—	—	—	—	—	1	1
0- .. ..	1	2	—	—	5	4	3	3	—	—	—	—	1	—	—	—
5- .. ..	—	—	—	—	3	3	7	7	—	—	—	—	—	—	—	—
0- .. ..	1	1	—	—	7	7	7	7	1	1	3	3	—	—	—	—
5- .. ..	—	—	—	—	7	7	10	10	—	—	2	2	—	—	—	—
0- .. ..	—	—	—	—	11	11	15	15	—	—	—	—	1	1	—	—
5- .. ..	—	—	—	—	6	6	8	8	1	1	—	—	1	1	—	—
0- .. ..	—	—	—	—	7	7	10	10	—	—	1	1	—	—	—	—
5- .. ..	—	—	—	—	8	8	10	10	—	—	—	—	1	1	—	—
0- .. ..	—	—	—	—	7	7	6	6	—	—	—	—	3	3	—	—
5- .. ..	—	—	—	—	2	2	3	3	1	1	—	—	—	—	—	—
0- .. ..	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—
5 and over	—	—	—	—	1	1	1	1	—	—	—	—	1	1	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	ACCIDENTAL POISONING								E900-E904				E900			
	E890-E895				E890				Accidental falls				Fall on stairs			
	Accidental poisoning by gases and vapours				by utility (illuminating) gas											
Ages at death	M		F		M		F		M		F		M		F	
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	163	163	220	219	133	133	213	212	979	977	1612	1611	166	167	279	
0- ..	—	—	1	1	—	—	—	—	7	7	4	4	—	—	—	—
1- ..	—	—	—	—	—	—	—	—	15	15	11	11	3	3	—	1
5- ..	—	—	—	—	—	—	—	—	9	9	5	5	—	—	—	—
10- ..	1	1	—	—	1	1	—	—	17	16	3	3	1	1	—	—
15- ..	3	3	1	1	1	1	1	1	14	14	—	—	1	1	—	—
20- ..	5	5	2	2	4	4	2	2	14	14	1	1	1	1	—	1
25- ..	4	4	3	3	3	3	3	3	20	20	1	1	2	3	—	—
30- ..	3	3	1	1	1	1	1	1	18	17	1	1	5	5	—	—
35- ..	3	3	5	5	1	1	5	5	27	27	4	4	6	6	1	1
40- ..	11	11	2	2	6	6	1	1	20	21	3	3	3	3	—	—
45- ..	14	14	14	14	10	10	13	13	41	41	12	12	10	10	4	4
50- ..	13	13	8	8	11	11	7	7	40	41	12	12	9	9	—	—
55- ..	8	8	15	15	5	5	15	15	42	42	22	22	9	9	7	7
60- ..	12	12	16	16	9	9	15	15	55	54	35	35	12	12	8	8
65- ..	17	17	18	18	16	16	17	17	62	62	73	73	12	12	19	19
70- ..	10	10	26	26	9	9	25	25	112	112	180	179	24	24	46	46
75- ..	21	21	37	36	19	19	37	36	143	142	319	318	30	30	70	70
80- ..	26	26	41	41	25	25	41	41	168	168	403	404	16	16	57	57
85 and over ..	12	12	30	30	12	12	30	30	155	155	523	523	22	22	64	64

Causes of death	E902				E903				E904				E910-E936			
	Other falls from one level to another				Fall on same level				Unspecified falls				Other accidents			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	250	248	119	118	283	283	599	595	240	239	612	613	1223	1219	552	
0- ..	6	6	2	2	—	—	1	1	1	1	1	1	126	124	106	
1- ..	10	10	8	8	1	1	1	1	1	1	1	1	67	66	52	
5- ..	8	8	3	3	—	—	1	1	1	1	1	1	49	50	24	
10- ..	14	13	2	2	—	—	—	—	2	2	1	1	65	66	10	
15- ..	12	12	—	—	—	—	—	—	—	—	—	—	67	67	7	
20- ..	11	11	—	—	—	—	—	—	1	1	—	—	85	84	7	
25- ..	14	14	1	1	1	1	—	—	2	2	—	—	64	64	7	
30- ..	12	11	—	—	1	1	—	—	—	—	1	1	71	70	9	
35- ..	16	16	2	2	—	—	1	1	1	1	—	—	72	72	13	
40- ..	10	11	1	1	3	3	1	1	2	2	—	—	77	76	16	
45- ..	15	15	3	3	8	8	2	2	7	7	3	3	79	79	16	
50- ..	19	20	2	2	3	3	5	5	4	4	5	5	86	85	31	
55- ..	14	14	2	2	7	7	3	3	7	7	10	10	76	77	32	
60- ..	18	17	3	3	11	11	15	15	7	6	9	9	73	73	28	
65- ..	13	13	7	6	21	21	18	19	12	12	27	27	40	40	33	
70- ..	10	10	13	13	37	36	53	53	36	37	68	67	42	41	42	
75- ..	10	9	18	20	55	54	117	114	44	45	114	114	48	49	40	
80- ..	22	21	21	22	74	74	169	168	56	57	156	156	20	20	34	
85 and over ..	16	17	31	28	61	63	212	211	56	53	215	217	16	16	45	



# APPENDIX B—continued

Table 2—continued

Causes of death	E911				E912				E916				E917			
	Accident caused by vehicle				Accident caused by machinery				Accident caused by fire and explosion of combustible material				Accident caused by hot substance, corrosive liquid, and steam			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	35	36	—	—	118	113	3	3	117	117	180	179	22	24	25	25
0- .. ..	—	—	—	—	—	—	—	—	—	—	2	2	1	1	—	—
1- .. ..	—	—	—	—	2	1	2	2	6	6	20	19	9	9	4	4
5- .. ..	—	—	—	—	—	1	—	—	4	4	12	12	—	—	—	—
10- .. ..	—	—	—	—	2	2	—	—	1	1	2	2	—	—	—	—
15- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	3	3	—	—	4	3	—	—	4	4	3	3	—	—	—	—
25- .. ..	1	1	—	—	12	11	—	—	5	5	3	3	1	1	—	—
30- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35- .. ..	3	3	—	—	8	8	—	—	2	2	1	1	2	2	—	—
40- .. ..	3	3	—	—	14	13	—	—	5	5	3	3	1	1	1	1
45- .. ..	3	3	—	—	8	9	—	—	6	6	2	2	1	1	—	—
50- .. ..	—	—	—	—	9	8	—	—	8	8	3	3	1	1	—	—
55- .. ..	5	5	—	—	15	15	—	—	9	9	6	6	2	3	1	1
60- .. ..	3	3	—	—	13	14	—	—	3	3	9	9	—	—	1	1
65- .. ..	7	7	—	—	8	8	1	1	8	8	9	9	—	1	2	2
70- .. ..	5	6	—	—	16	14	—	—	6	6	11	11	2	2	1	1
75- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- .. ..	2	2	—	—	4	4	—	—	7	7	10	10	—	—	3	3
85- .. ..	—	—	—	—	3	2	—	—	7	7	18	18	—	—	2	2
90- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
95- .. ..	—	—	—	—	—	—	—	—	16	16	21	21	1	1	2	2
0- and over	—	—	—	—	—	—	—	—	10	10	22	22	—	—	3	3
	—	—	—	—	—	—	—	—	10	10	23	23	1	1	5	5

Causes of death	E921				E922				E923				E924			
	Inhalation and ingestion of food causing obstruction or suffocation				Inhalation and ingestion of other object causing obstruction or suffocation				Foreign body entering other orifice				Accidental mechanical suffocation in bed and cradle			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages ..	115	111	84	80	13	10	8	7	3	6	3	4	51	52	44	43
0- .. ..	59	57	35	33	5	5	3	2	—	—	—	—	45	46	40	40
1- .. ..	7	6	4	4	3	3	1	1	2	2	—	—	1	1	3	3
5- .. ..	—	—	3	2	—	—	—	—	—	—	—	—	—	—	—	—
10- .. ..	3	3	2	2	—	—	—	—	—	—	—	—	1	1	—	—
15- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20- .. ..	2	2	—	—	1	1	—	—	—	—	—	—	—	—	—	—
25- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30- .. ..	2	2	1	—	—	—	—	—	—	—	—	—	1	1	1	—
35- .. ..	4	4	3	3	1	—	—	—	1	2	—	—	—	—	—	—
40- .. ..	2	2	1	1	1	—	—	—	—	1	—	—	—	—	—	—
45- .. ..	3	3	2	2	—	—	1	1	—	—	—	—	2	2	—	—
50- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55- .. ..	3	3	1	1	—	—	1	1	—	—	—	—	1	1	—	—
60- .. ..	6	5	3	3	—	—	—	—	—	—	—	—	—	—	—	—
65- .. ..	3	3	4	4	—	—	—	—	—	—	1	1	—	—	—	—
70- .. ..	5	5	3	3	2	1	—	—	1	—	—	—	—	—	—	—
75- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80- .. ..	4	4	4	4	—	—	—	—	—	—	—	—	—	—	—	—
85- .. ..	8	8	7	7	—	—	—	—	—	—	—	—	—	—	—	—
90- .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
95- .. ..	4	4	7	7	—	—	—	—	—	—	—	—	—	—	—	—
0- and over	—	—	3	3	—	—	2	2	—	—	—	—	—	—	—	—
	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death		E925				E926				E936				E928			
		Accidental mechanical suffocation in other and unspecified circumstances				Lack of care of infants under 1 year of age				Other and unspecified accidents				Other accidents caused by animals			
		M		F		M		F		M		F		M		F	
Ages at death		6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages	..	18	21	4	5	10	10	18	17	68	65	36	32	5	6	1	
0—	..	2	2	2	2	10	10	18	17	2	1	5	5	—	—	—	—
1—	..	1	1	—	1	—	—	—	—	1	1	3	2	—	—	—	—
5—	..	1	1	—	—	—	—	—	—	2	2	1	1	—	—	—	—
10—	..	3	3	—	—	—	—	—	—	7	7	—	—	—	—	—	—
15—	..	1	2	—	—	—	—	—	—	8	8	—	—	—	—	—	—
20—	..	—	—	—	—	—	—	—	—	5	4	—	—	—	1	—	—
25—	..	3	4	—	—	—	—	—	—	4	4	—	—	—	—	—	—
30—	..	2	2	—	—	—	—	—	—	4	4	1	1	—	—	—	—
35—	..	3	2	—	—	—	—	—	—	2	2	1	1	—	—	1	—
40—	..	1	1	1	1	—	—	—	—	3	3	1	—	1	1	—	—
45—	..	—	1	1	1	—	—	—	—	5	4	2	2	—	—	—	—
50—	..	—	1	—	—	—	—	—	—	3	3	1	1	1	1	—	—
55—	..	1	1	—	—	—	—	—	—	4	4	1	1	—	—	—	—
60—	..	—	—	—	—	—	—	—	—	6	5	1	1	—	—	—	—
65—	..	—	—	—	—	—	—	—	—	3	3	2	2	2	2	—	—
70—	..	—	—	—	—	—	—	—	—	1	1	4	4	1	1	—	—
75—	..	—	—	—	—	—	—	—	—	4	5	4	4	—	—	—	—
80—	..	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—
85 and over	..	—	—	—	—	—	—	—	—	3	3	8	7	—	—	—	—

Causes of death		E950-E959				E950				E954				E956			
		Therapeutic misadventure and late complications of therapeutic procedures				Therapeutic misadventure in surgical treatment				Therapeutic misadventure in anaesthesia				Late complication of surgical operation			
		M		F		M		F		M		F		M		F	
Ages at death		6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages	..	10	4	13	5	8	2	10	4	—	—	1	—	—	—	1	—
0—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15—	..	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—
20—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45—	..	—	—	1	1	—	—	1	1	—	—	—	—	—	—	—	—
50—	..	1	1	2	—	—	—	1	—	—	—	—	—	—	—	1	—
55—	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
60—	..	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—
65—	..	2	2	3	—	1	1	3	—	—	—	—	—	—	—	—	—
70—	..	1	—	2	2	1	—	2	2	—	—	—	—	—	—	—	—
75—	..	—	—	2	2	—	—	1	1	—	—	—	—	—	—	—	—
80—	..	2	1	2	—	2	1	2	—	—	—	—	—	—	—	—	—
85 and over	..	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—

# APPENDIX B—continued

Table 2—continued

Causes of death	E960-E965				E962				E965				E970-E979			
	Late effects of injury and poisoning				Late effects of other accidental injury				Late effects of injuries due to war operations				Suicide and self-inflicted injury			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
Ages ..	83	82	15	16	28	30	14	15	50	47	—	—	1538	1539	991	992
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	21	21	9	9
.. ..	1	1	—	—	1	1	—	—	—	—	—	—	31	31	16	16
.. ..	4	4	—	—	3	3	—	—	—	—	—	—	68	68	34	34
.. ..	4	4	—	—	2	2	—	—	1	1	—	—	69	70	40	40
.. ..	5	5	1	1	2	2	1	1	2	2	—	—	103	103	54	54
.. ..	4	4	—	—	2	2	—	—	1	1	—	—	123	123	61	61
.. ..	6	7	—	—	3	4	—	—	3	3	—	—	160	160	83	83
.. ..	1	1	—	—	1	1	—	—	—	—	—	—	183	183	144	144
.. ..	8	8	—	—	1	1	—	—	7	7	—	—	204	204	149	149
.. ..	25	25	1	1	5	6	1	1	19	18	—	—	171	171	131	131
.. ..	8	8	2	2	1	1	1	1	7	7	—	—	144	144	108	108
.. ..	8	6	1	1	2	2	1	1	6	4	—	—	118	118	93	93
.. ..	5	5	3	4	2	2	3	4	3	3	—	—	87	87	49	50
.. ..	2	2	5	4	1	1	5	4	1	1	—	—	33	33	15	15
and over	2	2	2	3	2	2	2	3	—	—	—	—	21	21	5	5

Causes of death	E970				E972				E973				E975			
	Suicide and self-inflicted poisoning by analgesic and soporific substances				Suicide and self-inflicted poisoning by gases in domestic use				Suicide and self-inflicted poisoning by other gases				Suicide and self-inflicted injury by submersion (drowning)			
	M		F		M		F		M		F		M		F	
Ages at death	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
Ages ..	154	154	191	190	690	691	552	554	34	33	2	2	126	127	86	86
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—
.. ..	—	—	—	—	—	—	7	7	1	1	—	—	1	1	1	1
.. ..	2	2	1	1	12	12	9	9	1	1	—	—	1	1	2	2
.. ..	5	5	7	7	33	33	14	14	2	2	—	—	2	2	4	4
.. ..	9	10	8	8	31	31	19	19	2	2	—	—	2	2	2	2
.. ..	14	13	14	14	47	47	27	27	1	1	—	—	6	7	3	3
.. ..	18	18	13	13	56	56	30	30	11	11	—	—	4	4	8	8
.. ..	17	17	11	11	69	69	50	50	6	6	—	—	9	9	6	6
.. ..	19	19	29	29	83	83	85	85	2	2	1	1	17	17	13	13
.. ..	26	26	29	28	83	83	87	88	1	1	1	1	17	17	15	15
.. ..	14	14	31	31	76	76	67	67	4	4	—	—	27	27	13	13
.. ..	18	18	19	19	58	58	60	60	—	—	—	—	7	7	6	6
.. ..	8	8	17	17	56	56	52	52	1	1	—	—	10	10	10	10
.. ..	4	4	9	9	41	42	36	37	2	1	—	—	17	17	1	1
.. ..	—	—	3	3	18	18	6	6	—	—	—	—	3	3	2	2
and over	—	—	—	—	9	9	3	3	—	—	—	—	3	3	—	—



# APPENDIX B—continued

Table 2—continued

Causes of death			E977				E978			
			Suicide and self-inflicted injury by cutting and piercing instruments				Suicide and self-inflicted injury by jumping from high place			
			M		F		M		F	
Ages at death			6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.	6th Rev.	7th Rev.
All ages	..	..	57	56	11	11	24	25	26	26
0-	..	..	—	—	—	—	—	—	—	—
1-	..	..	—	—	—	—	—	—	—	—
5-	..	..	—	—	—	—	—	—	—	—
10-	..	..	—	—	—	—	—	—	—	—
15-	..	..	1	1	—	—	—	—	—	—
20-	..	..	1	1	—	—	—	—	—	—
25-	..	..	1	1	2	2	—	—	4	4
30-	..	..	1	1	—	—	—	—	2	2
35-	..	..	1	1	—	—	3	3	2	2
40-	..	..	3	2	—	—	1	1	1	1
45-	..	..	3	3	—	—	1	1	1	1
50-	..	..	5	5	1	1	6	6	2	2
55-	..	..	6	6	2	2	2	2	—	—
60-	..	..	4	4	3	3	3	4	1	1
65-	..	..	13	13	2	2	1	1	5	5
70-	..	..	11	11	—	—	4	4	5	5
75-	..	..	4	4	—	—	2	2	1	1
80-	..	..	—	—	—	—	—	—	1	1
85 and over	..	..	3	3	1	1	1	1	1	1

# APPENDIX B—continued

**Table 3. Causes of death by sex, where the numbers of deaths do not differ between the Sixth and Seventh Revisions, July–December, 1957, England and Wales**

Note. Where blanks are shown against a 3-digit cause, the cause will be found in Table 2 (e.g. 003 Pleural tuberculosis) and only the 4-digit causes shown are in agreement (e.g. 003·0).

I.S.C. No.	Causes of death	Number of deaths (all ages)		I.S.C. No.	Causes of death	Number of deaths (all ages)	
		M	F			M	F
003	Pleural tuberculosis			143	Malignant neoplasm of floor of mouth	33	12
	003.0 Pleurisy specified as tuberculous	5	—	146	Malignant neoplasm of nasopharynx	35	17
005	Tracheobronchial glandular tuberculosis with symptoms	1	1	164	Malignant neoplasm of mediastinum	24	25
007	Other respiratory tuberculosis	—	1	165	Malignant neoplasm of thoracic organs (secondary)	15	11
008	Tuberculosis, unspecified site	2	—	173	Malignant neoplasm of other parts of uterus, including chorionepithelioma	—	23
011	Tuberculosis of intestines, peritoneum, and mesenteric glands	8	12	201	Hodgkin's disease	252	145
012	Tuberculosis of bones and joints, active or unspecified			202	Other forms of lymphoma (reticulosis)	43	42
	012.1			204	Leukaemia and aleukaemia		
	012.2 } Others included under 012	4	7		204.2 Monocytic leukaemia	57	48
	012.3			205	Mycosis fungoides	5	6
013	Late effects of tuberculosis of bones and joints	—	1	210	Benign neoplasm of buccal cavity and pharynx	1	1
014	Tuberculosis of skin and subcutaneous cellular tissue	1	2	214	Uterine fibromyoma	—	36
015	Tuberculosis of lymphatic system	1	7	215	Other benign neoplasm of uterus	—	9
019	Disseminated tuberculosis			217	Benign neoplasm of other female genital organs	—	1
	019.0 } Acute miliary tuberculosis	—	1	221	Pilonidal cyst	2	—
020	Congenital syphilis	3	4	222	Other benign neoplasm of skin	1	3
024	Tabes dorsalis	26	12	226	Lipoma	3	3
026	Other syphilis of central nervous system	16	12	228	Haemangioma and lymphangioma	6	7
	019.1 }	3	3	230–239	Neoplasms of unspecified nature	246	180
027	Other forms of late syphilis	3	3	239	Neoplasm of unspecified nature of digestive organs	15	9
030–039	Gonococcal infection and other venereal diseases	2	—	230	Neoplasm of unspecified nature of respiratory organs	6	6
039		2	—	231	Neoplasm of unspecified nature of ovary	—	1
030	Acute or unspecified gonorrhoea	1	—	236	Neoplasm of unspecified nature of other genito-urinary organs	4	2
035	Late effects of gonococcal infection	1	—	238	Neoplasm of unspecified nature of skin and musculoskeletal system	2	1
042	Other Salmonella infections	25	13	242	Angioneurotic oedema	2	2
045	Bacillary dysentery	2	2	245	Other allergic disorders	2	1
046	Amoebiasis	3	1	250	Simple goitre	3	10
048	Unspecified forms of dysentery	—	1	251	Non-toxic nodular goitre	1	8
051	Streptococcal sore throat	4	6	270	Disorders of pancreatic internal secretion other than diabetes mellitus	3	5
052	Erysipelas	3	1	273	Diseases of thymus gland	3	—
055	Diphtheria	2	1	277	Polyglandular dysfunction and other diseases of endocrine glands	7	9
061	Tetanus	18	2	280	Beriberi	—	1
063	Gas gangrene	—	2	281	Pellagra	—	1
064	Other bacterial diseases	—	1	282	Scurvy	—	3
070–074	Spirochaetal diseases, except syphilis	10	2	284	Late effects of rickets	—	3
074	Vincent's infection	1	1	288	Gout	8	1
070	Leptospirosis	9	—	290	Pernicious and other hyperchromic anaemias		
072	Other spirochaetal infections	—	1		290.1 Subacute combined degeneration of spinal cord	7	6
080	Acute poliomyelitis	111	62		290.2 Other hyperchromic anaemias	16	26
	080.0 Specified as bulbar poliomyelitis	50	23	292	Other anaemias of specified type	95	120
	080.1 With other paralysis	12	12		292.4 Aplastic anaemia	63	71
	080.3 Unspecified	49	27		292.0		
084	Smallpox	1	1		292.3		
085	Measles	6	10		292.5 } Others included under 292	32	49
087	Chickenpox	1	4		292.7		
089	Mumps	1	4	295	Haemophilia	7	—
093	Glandular fever (infectious mononucleosis)	3	2	297	Agranulocytosis	5	3
096	Other diseases attributable to viruses	4	1	300	Schizophrenic disorders (dementia praecox)	15	10
110	Vivax malaria (benign tertian)	1	—		Involuntal melancholia	3	2
112	Falciparum malaria (malignant tertian)	1	1		Paranoia and paranoid states	—	2
116	Other and unspecified forms of malaria	1	—		Presenile psychosis	17	32
122	Other protozoal diseases	1	—				
125	Hydatid disease	8	3				
126	Other cestode infestation	2	1				
132	Actinomycosis	3	1				
134	Other fungus infections	6	5				
138	Other infective and parasitic diseases	22	18				

# APPENDIX B—continued

Table 3—continued

I.S.C. No.	Causes of death	Number of deaths (all ages)		I.S.C. No.	Causes of death	Number of deaths (all ages)	
		M	F			M	F
307	Alcoholic psychosis ..	2	2	531	Abscesses of supporting structures of teeth ..	2	1
309	Other and unspecified psychosis ..	4	17	532	Other inflammatory diseases of supporting structures of teeth ..	5	2
310-318	Psychoneurotic disorders ..	10	15	536	Stomatitis ..	2	—
311	Hysterical reaction without mention of anxiety reaction ..	6	10	539	Diseases of oesophagus ..	31	18
312	Phobic reaction ..	1	—	542	Gastrojejunal ulcer ..	14	4
313	Obsessive-compulsive reaction ..	1	—	542.0	Without mention of perforation ..	12	4
314	Neurotic-depressive reaction ..	—	3	542.1	With perforation ..	2	—
316	Psychoneurosis with somatic symptoms (somatization reaction) affecting digestive system ..	—	1	543	Gastritis and duodenitis ..	21	19
317	Psychoneurosis with somatic symptoms (somatization reaction) affecting other systems ..	1	—	551	Appendicitis, unqualified ..	38	20
318	Psychoneurotic disorders, other, mixed, and unspecified types ..	1	1	552	Other appendicitis ..	2	—
322	Alcoholism ..	1	1	553	Other diseases of appendix ..	—	1
322.0	Acute ..	—	1	561	Hernia of abdominal cavity with obstruction ..	277	309
322.2	Unspecified ..	2	1	570	Intestinal obstruction without mention of hernia ..	13	10
325	Mental deficiency ..	33	28	571	Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over ..	167	195
333	Spasm of cerebral arteries ..	1	—	572	Chronic enteritis and ulcerative colitis ..	—	—
340	Meningitis, except meningococcal and tuberculous ..	14	5	572.0	Regional enteritis ..	18	21
340.0	H. Influenzae ..	18	19	574	Anal fissure and fistula ..	—	1
340.2	Due to other unspecified organism ..	8	5	577	Peritoneal adhesion ..	1	—
341	Phlebitis and thrombophlebitis of intracranial venous sinuses ..	151	251	580	Acute and subacute yellow atrophy of liver ..	24	30
342	Intracranial and intraspinal abscess ..	36	18	582	Suppurative hepatitis and liver abscess ..	5	5
345	Multiple sclerosis ..	—	1	583	Other diseases of liver ..	11	14
354	Migraine ..	57	56	586	Other diseases of gallbladder and biliary ducts ..	13	32
355	Other diseases of brain ..	17	13	601	Hydronephrosis ..	33	42
356	Motor neurone disease and muscular atrophy ..	36	28	602	Calculi of kidney and ureter ..	71	76
356.1	Amyotrophic lateral sclerosis ..	—	1	604	Calculi of other parts of urinary system ..	13	10
356.2	Others included under 356 ..	—	1	605	Cystitis ..	55	93
356.3	Trigeminal neuralgia ..	—	1	607	Urethritis (non-venereal) ..	1	1
361	Sciatica ..	13	8	608	Stricture of urethra ..	55	—
363	Polyn neuritis and polyradiculitis ..	1	1	612	Other diseases of prostate ..	7	—
364	Other diseases of peripheral nerves except autonomic ..	4	12	613	Hydrocele ..	1	—
368	Cataract ..	2	—	614	Orchitis and epididymitis ..	2	—
385	Detachment of retina ..	2	1	615	Redundant prepuce and phimosis ..	1	—
386	Glaucoma ..	1	1	617	Other diseases of male genital organs ..	2	—
388	Other diseases of eye ..	11	3	620-626	Diseases of breast, ovary, Fallopian tube, and parametrium ..	—	24
393	Mastoiditis without mention of otitis media ..	1	1	621	Other diseases of breast ..	—	2
395	Ménière's disease ..	1	1	622	Acute salpingitis and oophoritis ..	—	4
396	Other diseases of ear and mastoid process ..	1	1	623	Chronic salpingitis and oophoritis ..	—	2
397	Deaf mutism ..	—	1	624	Salpingitis and oophoritis, unqualified ..	—	7
402	Chorea ..	4	7	625	Other diseases of ovary and Fallopian tube ..	—	1
412	Diseases of tricuspid valve ..	2	5	626	Diseases of parametrium and pelvic peritoneum (female) ..	—	8
432	Acute pericarditis specified as non-rheumatic ..	7	6	630-637	Diseases of uterus and other female genital organs ..	—	80
453	Peripheral vascular disease ..	24	8	630	Infective disease of uterus, vagina, and vulva ..	—	4
453.0	Raynaud's disease ..	15	1	631	Uterovaginal prolapse ..	—	55
453.1	Thrombo-angiitis obliterans ..	9	5	633	Other diseases of uterus ..	—	16
453.2	Others included under 453 ..	19	20	634	Disorders of menstruation ..	—	4
454	Arterial embolism and thrombosis ..	29	83	635	Menopausal symptoms ..	—	1
460	Varicose veins of lower extremities ..	4	2	641	Other infections of genito-urinary tract during pregnancy ..	—	2
472	Acute pharyngitis ..	9	17	644	Other haemorrhage of pregnancy ..	—	3
474	Acute laryngitis and tracheitis ..	3	2	645	Ectopic pregnancy ..	—	10
510	Hypertrophy of tonsils and adenoids ..	1	3	646	Anaemia of pregnancy ..	—	1
511	Peritonsillar abscess (quinsy) ..	1	1	648	Other complications arising from pregnancy ..	—	3
512	Chronic pharyngitis and nasopharyngitis ..	13	7	650-652	Abortion ..	—	35
513	Chronic sinusitis ..	—	1	652	Abortion without mention of sepsis or toxæmia ..	—	14
514	Deflected nasal septum ..	1	1	650	Abortion with sepsis ..	—	19
515	Nasal polyp ..	1	1	651	Abortion with toxæmia, without mention of sepsis ..	—	2
516	Chronic laryngitis ..	39	18	652			
518	Empyema ..	4	2				
520	Spontaneous pneumothorax ..	85	169				
522	Pulmonary congestion and hypostasis ..						



# APPENDIX B—continued

Table 3—continued

I.S.C. No.	Causes of death	Number of deaths (all ages)		I.S.C. No.	Causes of death	Number of deaths (all ages)	
		M	F			M	F
670—	Delivery with specified complication	—	51	786	Symptoms referable to genito- urinary system	1	—
678				E801	Railway accident involving pas- senger	10	2
671	Delivery complicated by retained placenta	—	1	E802	Railway accident involving other and unspecified person	51	6
672	Delivery complicated by other postpartum haemorrhage	—	9	E810	Motor vehicle traffic accident involving collision with railway train	5	—
674	Delivery complicated by dispo- sition or malposition of foetus	—	7	E814	Motor vehicle traffic accident to rider or passenger of motorcycle in collision with non-motor vehicle or object	34	3
675	Delivery complicated by prolonged labour of other origin	—	9	E818	Motor vehicle traffic accident involving collision with animal or animal-drawn vehicle	1	1
677	Delivery with other trauma	—	7	E819	Motor vehicle traffic accident involving collision with fixed or unspecified object	3	—
681	Sepsis of childbirth and the puer- perium	—	6	E821	Motor vehicle traffic accident to rider of motorcycle without antecedent collision	232	18
682	Puerperal phlebitis and thrombosis	—	12	E832	Motor vehicle non-traffic accident to rider or passenger of motor- cycle	4	—
684	Puerperal pulmonary embolism	—	4	E833	Other motor vehicle non-traffic accident involving two or more motor vehicles	1	—
685	Puerperal eclampsia	—	2	E842	Accident to pedestrian caused by pedal cycle	18	12
688	Other and unspecified complications of the puerperium	—	2	E845	Other non-motor road vehicle accidents	1	3
690	Boil and carbuncle	14	13	E853	Other falls from one level to another in water transport	9	—
691	Cellulitis of finger and toe	1	1	E854	Falls on same level in water trans- port	2	—
693	Other cellulitis and abscess with lymphangitis	—	2	E855	Unspecified falls in water transport	1	—
695	Impetigo	—	1	E856	Machinery accident in water trans- port	3	—
701	Eczema	4	4	E858	Water transport accident of unspeci- fied cause	1	—
703	Other dermatitis	—	2	E860	Accident to personnel in military aircraft	31	—
706	Psoriasis and similar disorders	2	1	E861	Injury to occupant by accident to commercial "transport" aircraft	2	—
708	Pruritus and related conditions	—	1	E863	Injury to occupant by accident to other specified aircraft	3	1
709	Corns and callosities	1	—	E870	Accidental poisoning by morphine and other opium derivatives	1	—
711	Other dermatoses	2	—	E871	Accidental poisoning by barbituric acid and derivatives	38	60
712	Diseases of nail	1	—	E872	Accidental poisoning by aspirin and salicylates	8	14
720	Acute arthritis due to pyogenic organisms	5	7	E873	Accidental poisoning by bromides	—	1
724	Other specified forms of arthritis	1	1	E876	Accidental poisoning by strychnine	1	—
726	Muscular rheumatism	4	2	E879	Accidental poisoning by noxious foodstuffs	—	1
727	Rheumatism, unspecified	2	1	E880	Accidental poisoning by alcohol	3	1
730—	Osteomyelitis and other diseases of bone and joint	82	79	E881	Accidental poisoning by petroleum products	—	1
730	Osteomyelitis and periostitis	25	17	E882	Accidental poisoning by industrial solvents	3	—
731	Osteitis deformans	40	37	E883	Accidental poisoning by corrosive aromatics, acids, and caustic alkalis	2	6
733	Other diseases of bone	12	22	E888	Accidental poisoning by other and unspecified solid and liquid substances	7	—
735	Displacement of intervertebral disc	4	1	E891	Accidental poisoning by motor vehicle exhaust gas	1	—
737	Ankylosis of joint	—	1	E892	Accidental poisoning by other carbon monoxide gas	13	6
738	Other diseases of joint	1	1	E894	Accidental poisoning by other specified gases and vapours	16	1
743	Infective myositis and other inflam- matory diseases of tendon and fascia	1	—	E901	Fall from ladders	40	3
744	Other diseases of muscle, tendon, and fascia	51	28	E910	Blow from falling or projected object or missile	145	3
747	Hallux valgus and varus	—	2				
748	Clubfoot	—	1				
749	Other deformities	1	4				
767	Umbilical sepsis	6	6				
772	Nutritional maladjustment	3	1				
780	Certain symptoms referable to nervous system and special senses	5	1				
	780.2 Convulsions	4	—				
	780.0 } 780.1 } 780.3 } 780.4 } 780.5 } Others included under 780 780.6 } 780.7 } 780.8 } 780.9 }	1	1				
782	Symptoms referable to cardiovas- cular and lymphatic system	—	—				
	782.0 } 782.1 } 782.2 } 782.3 } 782.5 } Others included under 782 782.6 } 782.7 } 782.8 } 782.9 }	4	1				
785	Symptoms referable to abdomen and lower gastro-intestinal tract	—	2				

# APPENDIX B—continued

Table 3—continued

I.S.C. No.	Causes of death	Number of deaths (all ages)		I.S.C. No.	Causes of death	Number of deaths (all ages)	
		M	F			M	F
E913	Accident caused by cutting and piercing instruments .. ..	8	5	E953	Therapeutic misadventure in administration of drugs or biologicals .. ..	—	1
E914	Accident caused by electric current .. ..	58	9	E955	Other and unspecified therapeutic misadventure .. ..	2	—
E915	Accident caused by explosion of pressure vessel .. ..	4	—	E960	Late effect of motor vehicle accident .. ..	5	—
E919	Accident caused by firearm .. ..	38	5	E963	Late effect of self-inflicted injury .. ..	—	1
E927	Accidents caused by bites and stings of venomous animals and insects .. ..	3	3	E971	Suicide and self-inflicted poisoning by other solid and liquid substances .. ..	41	29
E929	Accidental drowning and submersion .. ..	381	107	E974	Suicide and self-inflicted injury by hanging and strangulation .. ..	245	70
E931	Excessive heat and insolation .. ..	—	4	E976	Suicide and self-inflicted injury by firearms and explosives .. ..	99	7
E932	Excessive cold .. ..	1	3	E979	Suicide and self-inflicted injury by other unspecified means .. ..	68	17
E933	Hunger, thirst, and exposure .. ..	4	7	E980	Homicide and injury purposely inflicted by other persons (not in war) .. ..	71	62
E935	Lightning .. ..	6	—	E985	Non-accidental poisoning by another person .. ..	10	10
E940	Complications due to non-therapeutic medical and surgical procedures .. ..	3	4	E981	Assault by firearm and explosive .. ..	7	4
E946	Generalized vaccinia following vaccination .. ..	1	—	E982	Assault by cutting and piercing instruments .. ..	10	12
E941	Postvaccinal encephalitis .. ..	—	2	E983	Assault by other means .. ..	42	36
E942	Other complications of smallpox vaccination .. ..	1	—	E985	Execution .. ..	2	—
E943	Post-immunization jaundice and hepatitis .. ..	—	1	E990	Injury resulting from operations of war .. ..	—	—
E944	Other complications of prophylactic inoculation .. ..	1	—	E999			
E946	Other complications due to non-therapeutic medical and surgical procedures .. ..	—	1				

Table 4. Causes of death where no deaths were recorded in the period July–December, 1957, England and Wales

I.S.C. No.	Causes of death	I.S.C. No.	Causes of death
004	Primary tuberculosis complex with symptoms .. ..	073	Yaws .. ..
006	Radiological evidence suggestive of active respiratory tuberculosis not classifiable elsewhere .. ..	080.2	Acute poliomyelitis specified as non-paralytic .. ..
021	Early syphilis .. ..	086	Rubella (German measles) .. ..
028	Latent syphilis .. ..	090	Dengue .. ..
031	Chronic gonococcal infection of genito-urinary system .. ..	091	Yellow fever .. ..
032	Gonococcal infection of joint .. ..	094	Rabies .. ..
033	Gonococcal infection of eye .. ..	095	Trachoma .. ..
034	Gonococcal infection of other sites .. ..	100	Louse-borne epidemic typhus .. ..
036	Chancroid .. ..	101	Flea-borne endemic typhus (murine) .. ..
037	Lymphogranuloma venereum .. ..	102	Brill's disease, not specified as louse- or flea-borne .. ..
038	Granuloma inguinale, venereal .. ..	103	Tabardillo (Mexican typhus), not specified as louse- or flea-borne .. ..
039	Other and unspecified venereal diseases .. ..	104	Tick-borne typhus .. ..
041	Paratyphoid fever .. ..	105	Mite-borne typhus .. ..
043	Cholera .. ..	106	Volhynian fever (trench fever) .. ..
044	Brucellosis (undulant fever) .. ..	107	Typhus, unspecified .. ..
047	Other protozoal dysentery .. ..	108	Other rickettsial diseases .. ..
058	Plague .. ..	111	Malariae malaria (quartan) .. ..
059	Tularaemia .. ..	113	Ovale malaria .. ..
060	Leprosy .. ..	114	Mixed malarial infections .. ..
062	Anthrax .. ..	115	Blackwater fever .. ..
071	Relapsing fever .. ..	117	Recurrent induced malaria .. ..
		120	Leishmaniasis .. ..
		121	Trypanosomiasis .. ..

# APPENDIX B—continued

Table 4—continued

I.S.C. No.	Causes of death	I.S.C. No.	Causes of death
124	Other trematode infestation	381	Corneal ulcer
127	Filariasis	382	Corneal opacity
128	Trichiniasis	383	Pterygium
129	Ankylostomiasis	384	Strabismus
130	Infestation with worms of other, mixed, and unspecified type	389	Blindness
131	Dermatophytosis	390	Otitis externa
133	Coccidioidomycosis	394	Other inflammatory diseases of ear
135	Scabies	398	Other deafness
136	Pediculosis	413	Diseases of pulmonary valve specified as rheumatic
137	Other arthropod infestation	421.2	Of tricuspid valve, specified as non-rheumatic
213	Benign neoplasm of breast	471	Acute sinusitis
218	Benign neoplasm of male genital organs	530	Dental caries
220	Benign melanoma of skin	534	Toothache from unspecified cause
232	Neoplasm of unspecified nature of breast	616	Sterility, male
233	Neoplasm of unspecified nature of uterus	620	Chronic cystic disease of breast
235	Neoplasm of unspecified nature of other female genital organs	632	Malposition of uterus
240	Hay fever	636	Sterility, female
243	Urticaria	637	Other diseases of female genital organs
244	Allergic eczema	640	Pyelitis and pyelonephritis of preg- nancy
275	Ovarian dysfunction	643	Placenta praevia
276	Testicular dysfunction	647	Pregnancy with malposition of foetus in uterus
283	Active rickets	673	Delivery complicated by abnormality of bony pelvis
285	Osteomalacia	676	Delivery with laceration of perineum, without mention of other laceration
310	Anxiety reaction without mention of somatic symptoms	680	Puerperal urinary infection without other sepsis
315	Psychoneurosis with somatic symp- toms (somatization reaction) affect- ing circulatory system	683	Pyrexia of unknown origin during the puerperium
320	Pathological personality	686	Other forms of puerperal toxæmia
321	Immature personality	689	Mastitis and other disorders of lactation
323	Other drug addiction	694	Acute lymphadenitis
324	Primary childhood behaviour dis- orders	696	Infectious warts
326	Other and unspecified character, behaviour, and intelligence dis- orders	697	Molluscum contagiosum
360	Facial paralysis	700	Seborrhoeic dermatitis
362	Brachial neuritis	702	Occupational dermatitis
365	Erythroedema polyneuritica	707	Lichen planus
367	Other diseases of cranial nerves	713	Diseases of hair and hair follicles
369	Diseases of peripheral autonomic nervous system	714	Diseases of sweat and sebaceous glands
370	Conjunctivitis and ophthalmia	716	Other diseases of skin
371	Blepharitis	721	Acute non-pyogenic arthritis
372	Hordeolum (stye)	732	Osteochondrosis
373	Iritis	734	Internal derangement of knee joint
374	Keratitis	736	Affection of sacro-iliac joint
375	Choroiditis	740	Bunion
376	Other inflammation of uveal tract	741	Synovitis, bursitis, and tenosynovitis without mention of occupational origin
377	Inflammation of optic nerve and retina	742	Synovitis, bursitis, and tenosynovitis of occupational origin
378	Inflammation of lachrymal glands and ducts	746	Flat foot
379	Other inflammatory diseases of eye	765	Ophthalmia neonatorum



# APPENDIX B—continued

Table 4—continued

I.S.C. No.	Causes of death	I.S.C. No.	Causes of death
781	Other symptoms referable to nervous system and special senses	E895	Accidental poisoning by unspecified gases and vapours
787	Symptoms referable to limbs and back	E918	Accident caused by radiation
789	Abnormal urinary constituents of unspecified cause	E920	Foreign body entering eye and adnexa
790	Nervousness and debility	E930	High and low air pressure
791	Headache	E934	Cataclysm
793	Observation, without need for further medical care	E945	Complications of anaesthesia for non-therapeutic purpose
E811	Motor vehicle traffic accident involving collision with street car	E951	Therapeutic misadventure in infusion or transfusion
E817	Motor vehicle traffic accident to occupant of motor vehicle in collision with pedestrian or pedal cycle	E952	Therapeutic misadventure in local applications
E834	Motor vehicle non-traffic accident while boarding and alighting	E957	Late complication of amputation stump
E840	Street car accident to pedestrian	E958	Late complication of irradiation
E841	Other street car accident, except collision with motor vehicle	E959	Late complications of other forms of treatment
E844	Accident to pedestrian caused by other non-motor road vehicle	E961	Late effect of accidental poisoning
E852	Fall on stairs and ladders in water transport	E964	Late effect of injury purposely inflicted by another person (not in war)
E862	Other injury in commercial "transport" aircraft	E984	Injury by intervention of police
E864	Aircraft accident at airfield to person not in aircraft	E990	Injury due to war operations by gas and chemicals
E865	Aircraft accident elsewhere to person not in aircraft	E991	Injury due to war operations by gunshot
E875	Accidental poisoning by sulpho- namides	E992	Injury due to war operations by grenade and land mine
E877	Accidental poisoning by belladonna, hyoscine, and atropine	E993	Injury due to war operations by bomb
E884	Accidental poisoning by mercury and its compounds	E994	Injury due to war operations by marine mine, depth charge, and torpedo
E885	Accidental poisoning by lead and its compounds	E995	Injury due to war operations by explosion of artillery shell
E886	Accidental poisoning by arsenic and antimony, and their compounds	E996	Injury due to war operations by explosion of undetermined origin
E887	Accidental poisoning by fluorides	E997	Injury due to war operations by aircraft destruction
E893	Accidental poisoning by cyanide gas	E998	Injury due to war operations by other and unspecified means
		E999	Injury due to war operations but occurring after cessation of hostilities

## **APPENDIX C**

The following paper was prepared by the World Health Organization Centre for Classification of Diseases, and has been distributed to National Committees on Vital and Health Statistics. It is reproduced here because it is thought that it may be of interest generally to readers of the Registrar General's Statistical Review in this country.

### **COMPARISON OF CAUSE-OF-DEATH CODING : CANADA, ENGLAND AND WALES, AND THE UNITED STATES OF AMERICA**

**Study made by the World Health Organization Centre for the Classification of Diseases, London**

Discussions on special coding problems have taken place from time to time between the vital statistics offices of the three countries, with WHO Centre acting as co-ordinator. In these discussions quite frequent disagreements in coding were recorded, and this led to anxiety about the international comparability of mortality statistics. It was appreciated that the disagreements concerned problem cases, selected because they had given rise to some difficulty in assignment, and it was felt that it would be of value to have some information on the extent of disagreement over the whole range of classifying statements of cause of death.

The World Health Organization Centre accordingly invited the three offices, the Dominion Bureau of Statistics (DBS), Canada, the General Register Office (GRO), England and Wales, and the National Office of Vital Statistics (NOVS), United States of America, to co-operate in a comparison of cause-of-death coding. All three offices agreed and their co-operation is gratefully acknowledged. The Sixth Revision of the International Statistical Classification and Rules of Selection were used in the comparison.

#### **Aims**

The aims of the study were:

- (a) to compare the statistical pictures produced by the three offices when coding the same set of routine death certificates;
- (b) to investigate the causes of disagreements in assignment;
- (c) to discover what measures are necessary to eliminate the causes of disagreement.

#### **Preparation of coding decks**

The precise methods to be used in selecting the death certificates were left to the individual offices acting within the following framework laid down by WHO Centre:

1. Each office should prepare a deck of 1,000 recent certificates, consisting of a small number of batches.

2. The batches should be chosen to eliminate any obvious bias (e.g. the whole 1,000 should not come from one city) but no attempt need be made to select a representative sample in the statistical sense. Seasonal fluctuations were regarded as unimportant but the period of any epidemic should be avoided.

3. Each batch should be a straight run of certificates without any selection whatsoever.

4. Each case should give sex, age, the original information reported as cause of death, and any additional information which had been volunteered by the certifiers or elicited by means of inquiries to the certifiers.

The aim of the selection procedure was to produce sets of certificates which would be representative of those met with in the normal course of events; no certificate was to be excluded because it was "too simple" for a test of coding.

### **Coding of the certificates**

Coding decks were exchanged so that each office had copies of all three, and the certificates were coded in accordance with the following instructions:

1. Each office should code all 3,000 certificates in a manner as close as possible to its usual coding procedure, i.e. spreading the work over the coders and checkers in the usual way, requesting no more than the usual amount of professional advice, and generally aiming at normal conditions.

2. Additional information volunteered by the certifiers or obtained by inquiry should be taken into account.

3. Each office should code according to the international rules of selection plus any local rules, or modifications of the international rules, which it normally used. The assignments, however, should be expressed only as categories, three- or four-digit, of the International Classification—local additional subdivisions should not be shown.

4. Each office should send to WHO Centre a copy of each deck duly coded in the manner described above.

As in the selection of certificates, so in the coding, the aim was to approximate as closely to normal conditions as was compatible with the nature of the study. It was, of course, impossible to achieve complete normality since coders knew that this was not part of their regular work and, in fact, knew the purpose of the study. The intention was to avoid *provoking* an attitude of extreme carefulness.

Each of the three offices coded the certificates in this manner, but in addition NOVS had a complete review by the cause-of-death coding instructor in consultation with the supervisor, a procedure not normally used in that office. The Dominion Bureau of Statistics and GRO used both the E and the N classifications of accidents, poisonings, and violence; NOVS used the E classification only.

### **Comparison of distributions**

The World Health Organization Centre had, therefore, four sets of codes for the 3,000 death certificates; one each from DBS and GRO and two from NOVS, the first (NOVS a) being comparable to the other two in method of coding, and the second (NOVS b) being the result of a further check by the coding instructor in consultation with the supervisor. A table was prepared showing the four distributions side by side for the categories of the Detailed List. Table I (page 295) is a summary of this table.



**Table I. Distribution of 3,000 certificates of cause of death according to assignments in three vital statistics offices**

I.S.C. Nos.	Title	DBS	GRO	NOVS	
				a	b
001-019	Tuberculosis (all forms) .. .. .	31	30	30	28
020-138	Other infective and parasitic diseases .. .. .	24	22	21	20
140-148	Malignant neoplasm of buccal cavity and pharynx .. .. .	11	11	10	10
150-159	Malignant neoplasm of digestive organs and peritoneum .. .. .	180	179	177	177
160-165	Malignant neoplasm of respiratory system .. .. .	69	71	68	67
170-181	Malignant neoplasm of breast and genito-urinary organs .. .. .	104	99	103	100
190-199	Malignant neoplasm of other and unspecified sites .. .. .	43	46	49	48
200-205	Neoplasms of lymphatic and haematopoietic tissues .. .. .	23	22	22	22
210-239	Benign neoplasm and neoplasm of unspecified nature .. .. .	9	11	11	10
240-289	Allergic, endocrine system, metabolic and nutritional diseases .. .. .	67	70	65	67
290-299	Diseases of the blood and blood-forming organs .. .. .	8	9	10	9
300-326	Mental, psychoneurotic, and personality disorders .. .. .	12	14	7	9
330-334	Vascular lesions affecting the central nervous system .. .. .	383	371	358	359
340-398	Other diseases of the nervous system and sense organs .. .. .	18	24	16	20
400-416	Rheumatic fever and chronic rheumatic heart disease .. .. .	52	59	61	63
420-422	Arteriosclerotic and degenerative heart disease .. .. .	854	847	847	852
430-434	Other diseases of heart .. .. .	56	57	68	61
440-443	Hypertensive heart disease .. .. .	122	120	118	118
444-447	Other hypertensive disease .. .. .	34	36	37	36
450-456	Diseases of arteries .. .. .	80	79	80	83
460-468	Diseases of veins and other diseases of circulatory system .. .. .	11	13	8	13
480-483	Influenza .. .. .	28	29	28	28
490-493	Pneumonia .. .. .	128	129	141	140
500-502	Bronchitis .. .. .	110	111	109	106
470-475 } 510-527 }	Acute upper respiratory infections and other diseases of respiratory system .. .. .	37	38	34	39
540-545	Diseases of stomach and duodenum .. .. .	18	21	19	19
580-587	Diseases of liver, gallbladder, and pancreas .. .. .	33	35	35	35
530-539 } 550-578 }	Other diseases of digestive system .. .. .	38	39	42	41
590-594	Nephritis and nephrosis .. .. .	43	45	49	47
660-637	Other diseases of genito-urinary system .. .. .	33	32	39	37
640-689	Deliveries and complications of pregnancy, childbirth, and the puerperium .. .. .	4	4	2	3
690-716	Diseases of the skin and cellular tissue .. .. .	2	2	2	2
720-749	Diseases of the bones and organs of movement .. .. .	10	9	9	11
750-759	Congenital malformations .. .. .	34	31	35	32
760-769	Birth injuries, asphyxia, and infections of newborn .. .. .	57	55	51	52
770-776	Other diseases peculiar to early infancy .. .. .	42	42	46	45
780-795	Symptoms, senility, and ill-defined conditions .. .. .	37	33	36	36
E800-E999	Accidents, poisonings, and violence .. .. .	155	155	157	155
	<b>Total .. .. .</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>

## **Causes of disagreement; remedies**

The World Health Organization Centre listed those cases where the four codes were not identical. There were 345 in all, about 11 per cent of the whole series. This rather high level of disagreement is not reflected in Table I because the differences are to some extent compensating within the groups of categories. For example, there were 34 cases of disagreement involving category 420·1 (Coronary disease), i.e. 34 cases where at least one office but not all four had coded to 420·1, but the frequencies for 420·1 in the four distributions were all within 5 (DBS 448, GRO 448, NOVS a 443, NOVS b 444). Similarly, the frequencies assigned to the group 400-468 (Diseases of the circulatory system) by DBS and GRO were 1,209 and 1,211 respectively, a difference of 2 but there were only 1,185 cases which *both* offices coded to this group.

In attempting to analyse the causes of the disagreements, 109 of them can be discounted as far as the future is concerned. A few of these were admitted coding errors, but the majority were due to conflicts between rulings in the different offices which have been resolved by the Seventh Revision, which came into operation at the beginning of 1958. For example, GRO assigned cancer of bronchus to 162 instead of 163, a change which has been incorporated into the Seventh Revision. Again, a large number of these disagreements arose from different interpretations of the term "specified as primary" in the titles of categories 162 and 163, but the ambiguity is ended in the Seventh Revision.

Of the remaining 236 disagreements, the largest group resulted from different views on what constitutes a "highly improbable sequence". There were 75 examples of this type, and it was possible to discern a number of patterns. The National Office of Vital Statistics, for example, did not accept sequences in which lobar pneumonia was said to be due to cerebral vascular lesions or heart diseases, whereas the other two offices were prepared to take the lobar pneumonia as secondary. The Dominion Bureau of Statistics considered cerebral vascular lesions reported as due to heart conditions to be highly improbable sequences, whereas GRO and NOVS accepted them. The General Register Office was alone in accepting these conditions in the reverse order, i.e. heart, including coronary, conditions reported as due to cerebral vascular lesions. Some of these decisions were based on local peculiarities in certification. For example, GRO accepted sequences in the form "heart condition due to arteriosclerosis due to chronic bronchitis" because inquiries had shown that more often than not the certifier intended to indicate the chronic bronchitis rather than the arteriosclerosis as the underlying cause of the heart disease.

A similar group, containing 29 cases, involved decisions about "direct sequel" for exception 1 (d) and "frequent complication" for supplementary rule 3 (a). The main difficulty seemed to arise when Part I of the certificate contained possibly terminal conditions such as pulmonary embolism or pneumonia, and Part II contained a very serious condition such as cancer, or mention of an operation.

There were a further 41 cases which arose out of the selection rules linking one condition with another when jointly mentioned, or preferring a more specific term to a less definite one, or a later manifestation to an earlier form of the same disease. In the Seventh Revision the wording of these rules has been tightened up, so that differences in their interpretation should be fewer in future.

A small group, of 21 cases, was due to the application of definite local rulings in one or another of the three offices. Some of these rulings catered for particular usages or modes of certification. For example, the term "metastatic cancer" is used in England and Wales to mean "secondary cancer" whereas in Canada and the United States of America it is used in the sense of "cancer giving rise to metastases".

The remaining cases, 70 in all, included a few where an inquiry had elicited a controversial response from the certifier and a few coroners' cases not certified on the international form of certificate, but mainly concerned specific terms and expressions which could not be found in their stated form in the International Classification. Most of the disagreements on the coding of accidents came into this group.

In September 1957, Dr. W. P. D. Logan, Head of WHO Centre and Chief Medical Statistician of GRO, discussed the differences in coding with Dr. I. M. Moriyama of NOVS and Mr. F. F. Harris of DBS. Some agreed decisions were made on the acceptability or otherwise of certain sequences in order to reduce the number of differences due to this cause. It was proposed that the exercise be repeated later, in order to see the effect of these decisions and of the Seventh Revision of the International Classification and the Rules of Selection. A further report will be made in due course.

## APPENDIX D

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## APPENDIX E

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## APPENDIX F

### ARTICLES BY OFFICERS OF THE GENERAL REGISTER OFFICE PUBLISHED DURING 1957

- Benjamin, B.      ..      ..      The Measurement of Morbidity. *Journal of the Institute of Actuaries*, Vol. 83, page 225, 1957.
- Benjamin, B.      ..      ..      Demographic Aspects of Ageing. *The Biology of Ageing*, page 55. Published by the Institute of Biology, 1957.

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